

PN-ACA-795

**EMPOWERING LOCAL RESOURCE MANAGERS
IN THE "PUBLIC" FOREST RESERVES (I.E., THE PAH SA-NGUAN)
OF THE KINGDOM OF THAILAND**

Owen J. Lynch
Associate
Center for International Environment and Development
World Resource Institute

and

Janis B. Alcorn
Senior Program Officer for Asia/Pacific
Biodiversity Support Program/World Wildlife Fund

A

EMPOWERING LOCAL RESOUCE MANAGERS IN THE "PUBLIC" FOREST RESERVES (I.E., THE *PAH SA-NGUAN*) OF THE KINGDOM OF THAILAND

TABLE OF CONTENTS

Acknowledgements.....	i
Preface to the Thai Edition.....	ii
Introduction	
Constraints and Opportunities.....	1
Empowering Local Communities in the <i>Pah Sa-nguan</i>	1
The <i>Pah Sa-nguan</i>	
Legal Extent.....	4
Extent of Forest Cover.....	4
Conservation/Protection Forests.....	6
Economic Forests.....	6
Local Forest Management in the <i>Pah Sa-nguan</i>	
Individual and Communtiy Forestry.....	8
Communtiy Forest Groves.....	9
Rotation Swidden Forest Management.....	12
Long Fallow Swidden Forest Management.....	13
In-field Agroforestry.....	14
Adaptation of Local Forestry Initiatives.....	15
Adaptations to Competition in the <i>Pah Sa-nguan</i>	
Commercial Pressures to Abandon Conservation Practices.....	17
Outsiders' Efforts to Take Over Viallager-Managed Forests.....	20
Reforestation Programs in the "Economic Forest" Zone.....	24
Population Growth and Agricultural Expansion.....	26
Concentration of Landholdings.....	27
Resettlement and Migration.....	27

Pressures to Adopt Modern Systems Low in Biodiversity.....	28
Tenurial Status of People in the <i>Pah Sa-nguan</i>	
The Prevailing Perspective	
A Historical Overview.....	29
Land Code of 1954.....	29
National Reserved Forest Act of 1964.....	30
National Park and Game Protection Acts.....	31
Government Responses.....	31
An Alternative Perspective	
Rights of Possession.....	32
Indigenous and Tribal Rights in International Law	
The Historical Basis.....	34
The Contemporary Basis.....	35
Recommendations / Options	
The Emerging Consensus.....	38
Communitiy Considerations	
Communtiy-Based Tenurial Strategies.....	39
Communtiy Titles.....	40
Community Forest Leases.....	42
Communtiy Forest Leases: A Model Agreement.....	43
Procedural Considerations	
Legal Personalities.....	47
Identification of Prospective Lessees.....	47
Forest Protection Leases.....	48
Cooperative Enforcement Policies.....	53
Research.....	53
Education, Training and Networking.....	53
Development of Additional Conservation Incentives.....	54
Conclusion.....	54
Endnotes.....	56
Appendix I.....	71
Appendix II.....	78
Bibliography.....	82

d

ACKNOWLEDGMENTS

The authors were privileged to work with and receive assistance from a variety of organizations, forest communities and individuals. Foremost in this regard was the Chulalongkorn University's Social Research Institute (CUSRI), especially Dr. Amara Pongsapich, Vitoon Viriyasakoltorn, and Charles Mehl, and Saowalee Srikanok Coyle who assisted with field research and initial translation of the paper into Thai. Special thanks is also due the many farmers and village headmen who willingly shared their time and insights.

Others who generously contributed their thoughts and time include officials and staff of the Royal Forest Department, the Project for Ecological Recovery, Chiang Mai University Social Research Institute, the Ford Foundation's Bangkok office, the SVITA Foundation, the Local Development Institute, and World Wildlife/Thailand. Particularly helpful assistance was provided by Prof. Wanit Chutiwong, Prof. Saneh Chamarik, Witoon Permpongsacharoen, Srisuwan Kuankachorn, Dr. Malee Suwana-adth, Dr. Lert Chuntanaparb, Dr. David Thomas, Dr. John Cool, Dr. Peter Kundstadter, Dr. Somsak Sukwong, Dr. Tongoj Onchan, Dr. Niwat Ruangpanit, and Dr. Yos Santasombat.

Helpful critiques of earlier drafts were provided by Walt Reid, Marcus Colchester, Larry Lohmann, Christine Haugen, William Stewart, Walter Arensberg, David Gow, and Chip Barber. Sheila Mulvahill kindly provided editorial assistance. Additional names of people who extended assistance can be found in the List of Contacts. The footnotes acknowledge an array of other intellectual debts. Any errors or omissions in the paper, however, are solely the responsibility of the authors.

1

D

Preface to the Thai Edition

Environmental conservation and natural resource management are crucial problems throughout the world. For Thailand, many of the past forestry policies have had adverse impacts on the country's current economic and social development. The Thai government is now trying to rectify the problem by establishing natural resource management practices that are conducive to social and economic development and acceptable, in a socially just way, to the various parties involved.

The Royal Forest Department (RFD) established a National Forestry Committee in 1989 to formulate policies and strategies for forestry activities. One of the initial policies proposed was to designate 15 percent of the country's total land area a conservation forest and another 25 percent of the land areas an economic forest.

In practice, the policies of managing conservation forests and economic forest face considerable difficulty in terms of forest demarcation, land rights, and the contribution and participation of local people in planning, managing, and using the forest lands. The implementation of these policies needs to take into consideration the effects on landless villagers and poverty eradication programs.

The government is seeking solutions and carrying out various strategies, including the formulation of the Forestry Sector Master Plan, the Project for Relocation of People Living in Deforested Areas, and the promulgation of several new forestry bills to reform plantation forestry, community forestry, wildlife protection, and other forestry activities to fit current needs and conditions. Still all these attempts by the government are widely criticized by the public. The Forestry Sector Master Plan, for example, is criticized for being foreign in origin, with its major concern the supply of wood for the world market. The critics would like the Master Plan to concentrate more on forestry activities that would benefit the people living in and near the forest.

The Project for Relocation of People Living in Deforested Areas has been attacked for its objective of removing people from deforested areas in order to clear the way for conservation of forests and for large scale plantations as economic forests. Concern for the poor and landless has been grossly inadequate. It appears as though the poor must make sacrifices for the benefit of investors who want to convert deforested areas into tree plantations. The project has met with considerable resistance. The conflicts between the implementors, who are regional army officers, and the poor villagers has aroused extensive sympathy for the villagers from many interested groups. It is clear that this problem needs to be dealt with quickly, yet judiciously. The government also needs to assure that any people relocated will not suffer economically from their displacement.

Following the extensive public criticism of the promotion of economic forests, the government decided to promote community forests. Yet many see the government's efforts in community forestry to be insufficient. Although both the Forest Plantation Act and the Community Forest

Act were drafted, only the Forest Plantation Act has been promulgated (on February 7, 1992). The Community Forestry Act remains under review and revision. No one knows when, or whether, this bill will ever pass the approval of the Cabinet and the Parliament. Nor is it certain that the revised bill will meet the needs of the villagers who should benefit from the community forestry, or those forestry officials who are eager to implement an effective community forestry program.

The report, "Empowering Forest Managers: Toward More Effective Recognition of the Rights, Contributions and management Capabilities of the People Occupying Forest Reserves", offers an alternative to resolve conflicts regarding forest occupation. The two authors, who are interested in natural resource management, selected Thailand as a case study. Both have had considerable experience in other countries in Asia and the rest of the world. For both, this was their first major exploration of the problems facing Thailand. The opinions expressed in this report are those of the authors, and not of the Chulalongkorn University Social Research Institute (CUSRI)

The Chulalongkorn University Social Research Institute agreed to publish the Thai translation of this report to offer the public diverse views on crucial issues facing our economy. CUSRI hopes that people concerned with natural resources management, and in particular with the forestry problems facing Thailand, will take this report as food for thought that can help provide insights in their own thinking. CUSRI hopes the presentation of diverse opinions and the introduction of new ideas about these issues will benefit all concerned as we seek alternatives to solve the crucial natural resource problems facing our country.

Amara Pangsapich
CUSRI Director
June 4, 1992

"[W]e are dealing with the environment at the world level. In the past it was only at the national level; now it is at the world level. But then, it has become the responsibility we have. In fact we have to talk about things at the world level because Thailand is progressing to a far more important position in the world, with the reputation for being a remarkably stable country, and we have to bear even more responsibility for the world. This good reputation is the virtue of this country. Where virtue exists, virtue must be maintained. Wherever virtue is lacking, virtue must be nurtured. Wherever there is evil, evil must be suppressed."

H.M. Bhumibol Adulyadej
King of Thailand
December 4, 1989

"This is our community forest that was just put inside the new national park. We have been here for over 150 years. We protected this forest before the roads were put in. We set up a roadblock on the new road to stop the illegal logging. We caught the district police chief and arrested him for logging. We warned him not to come again. We can protect the forest, but we need the state behind us. Without the help of the state, it cannot be done. We want to follow the middle way. We need cooperation between the village and the government."

Tambon leader
Muang District, Lampoon Province
November 1990

Introduction

Constraints and Opportunities

The forty percent of Thailand's land mass that is classified as "public" forest reserves is known as the *Pah Sa-nguan*. At best, only one-third of this area is actually forested. This discrepancy highlights an important indicator of Thailand's increasingly severe deforestation crisis. The reasons for the crisis are complex; they involve an array of domestic and foreign factors, of which logging, land speculation, export crop production, and population growth are foremost. So far, the most dramatic environmental consequences of the crisis occurred during November 1988 when thousands of landslides and major flooding ravaged largely denuded areas in the South and claimed at least 370 lives.

Public awareness about the deforestation crisis is growing in Thailand, as is the clamor for effective and innovative strategies to conserve and sustainably develop what remains of the nation's forest resources. The most important recent innovation may have been the Royal Thai Government's (RTG) decision in 1989 to ban, at least for the time being, any further commercial logging within the kingdom.

Before the logging ban, economic and political elites holding timber concessions enjoyed almost exclusive legal access to the kingdom's forest resources. The ban effectively prevents these concessionaires from acquiring legal rights to harvest the remaining trees. It also provides the kingdom with a unique opportunity for involving competent local forest managers in an effort to sustainably develop the remaining forest resources and to ensure that tenurial rights in the *Pah Sa-nguan* are allocated in an equitable and environmentally astute manner.

The official RTG response to this opportunity may eventually culminate in the enactment of the Community Forestry Law. As of year-end 1993, however, that law has yet to be enacted, and it may never be. The official draft, while containing some positive provisions, provided that communities which have protected and sustainably utilized natural resources in areas designated as conservation/protection forests will be ineligible for official recognition of their customary tenurial rights. (See Appendix One for an English translation of an official draft.)

Empowering Local People in the *Pah Sa-nguan*

In most areas of Thailand, viable strategies to conserve and sustainably develop the remaining natural forests will include local people who live in the forests or use forest resources. People dependent on still forested areas are in need of national legal and economic incentives to protect and sustainably manage their local resources bases.

Stated simply, the Royal Forestry Department (RFD) and other concerned governmental institutions by themselves do not have --and most likely never will have -- the institutional capacity to manage and protect Thailand's remaining natural forest resources. At the same time,

a significant number of people living in the *Pah Sa-nguan* understand the need for forest conservation and are already protecting it.

If there is a solution to deforestation in many regions of Thailand -- especially in the North, where 70 percent of the remaining forests are located -- it will, by necessity, involve the millions of people living in or directly dependent on the *Pah Sa-nguan*.¹ The customary property rights of long-term occupants can and must play a role in any effort to effectively conserve and rehabilitate the nation's forests.

Some incremental, yet important, steps towards recognition of these realities have been made, most notably the RFD's National Forest Allotment (STK) Project and the Forest Village Program. If the remaining natural forests are to be saved, however, much more should be done, and done quickly, to empower local people in areas that are still forested. In the words of one Thai familiar with the deforestation crisis, the government must "return the forests to the people, before it is too late."²

Unfortunately, current policies and most development practices described in this paper lead in the opposite direction. The Royal Thai Government, acting primarily through the Royal Forestry Department, still fails to appreciate the conservation efforts of many rural resource users. Instead, the RFD is implementing a forestry policy which reclassifies areas within the *Pah Sa-nguan* as protection forests, plantation forests, national parks, and wildlife sanctuaries. People living within these areas will be ineligible to receive any recognition or grant of tenurial rights. Instead, they are liable to be evicted. Even more ominous, the RFD has embarked on a massive, forced eviction scheme known as the *Khor Jor Kor* program which may eventually uproot as many as 1.5 million people, including as many as 250,000 forest-dependent families and 2,500 villages.³ Widespread opposition to the program, however, has hampered its implementation and the program was repealed.⁴

Forest managers in those degraded areas designated as commercial/production forests might benefit from the newly enacted Forest Plantation Bill by acquiring some degree of tenurial security.⁵ (See Appendix Two for an English translation.) Participation under the proposed law, however, is anything but assured. Current trends indicate that most forest-dependent people are likely to continue losing out to large-scale, government-sponsored efforts to promote commercial plantations.

Meanwhile, nongovernment organizations (NGOs), academicians, and public interest groups are actively responding to the predicament of those people living in or directly dependent on the *Pah Sa-nguan*. Many individuals and organizations are working to promote a dialogue between forest farmers and the RTG in hopes that a consensus can be reached on how best to conserve and sustainably develop remaining forests. To be effective, the consensus should recognize that people living in or dependent on the *Pah Sa-nguan*, including those in areas that are still forested, require legal and economic incentives to conserve, defend, and sustainably develop what remains of the natural forests.

This paper reviews, synthesizes, and analyzes various perspectives concerning the presence, agricultural activities, rights, and tenorial claims of people living in the *Pah Sa-nguan*. Part I describes and contrasts the legal and physical dimensions of the *Pah Sa-nguan*. Part II entails a review of the literature local-level forestry management systems in Thailand (much of which has been verified by field observation). Part III describes the responses of people living in or dependent on the *Pah Sa-nguan* to the increasing competition for forest resources. The tenorial status of people living within the *Pah Sa-nguan* is examined from the prevailing perspective of Thai national law in Part IV and is contrasted with an alternative perspective based on existing national and international laws. Part V contains recommendations and options that merit consideration by the RTG and international donor agencies in their efforts to provide forest farmers with both short-and long-term incentives to manage forest resources in a productive and sustainable manner.

I. The *Pah Sa-nguan*

A. Legal Extent

The legal definition of forest land (i.e., the *Pah Sa-nguan*), in Thailand is not contingent on the nature or extent of forest cover. Since 1941, public forest land has been defined as "land which has not been acquired by any person" according to existing land laws.⁶ This definition allowed that the *Pah Sa-nguan* could be diminished as farmers established or were granted titles over previously "unclaimed" forest land. The definition alone created a legal incentive for entrepreneurs and landless farmers to migrate into forest areas and establish claims.

Poverty, land speculation, and population pressures also provided incentives to migrate. As a result the postwar decades were characterized by widespread acquisition of legal claims over the nation's forest lands, especially in the Northeast. Along with rampant legal and illegal logging and the extraction of other forest resources, this migration contributed to massive deforestation.

In 1961, the RTG responded by establishing a policy that provided that at least one-half of Thailand's total land mass should be designated as forest. Three years later, the National Forest Reserve Act was passed, empowering the Minister of Agriculture to establish forest reserves. Within an established reserve, the minister could legally evict unauthorized occupants and prohibit unauthorized exploitation of forest resources.⁷ The obvious lack of bureaucratic capacity to enforce the act on a large scale was apparently unaddressed.

By 1988, more than 20 million hectares (ha), or 40 percent of the kingdom's total land mass, had been designated as "forest reserves."⁸ Such denomination fulfilled the 1961 policy, but in many areas, it bore little relation to the actual extent of forest cover. It also had little impact locally. A U.S. Agency for International Development-sponsored study concluded that "little or no respect appears to exist for the delineation of forest boundaries. Neither the boundaries of national parks [nor those of] other reserved forests . . . are being enforced."⁹

The dissonance between policy and fact was implicitly acknowledged in 1985, when a new National Forestry Policy was promulgated. The new policy retreated from the ambitious earlier strategy: forest reserves would now cover at least 40 percent of the kingdom's land area. The RFD was authorized to degazette slightly more than 20 percent of the *Pah Sa-nguan*. Legal jurisdiction over most reclassified areas is usually transferred to the Agrarian Land Reform Office (ARLO) for eventual documentary titling to actual occupants or landless farmers. It appears likely that most, if not all, local beneficiaries of the new Forest Plantation Bill will be occupants of degazetted land.

B. Extent of Forest Cover

As the foregoing discussion makes clear, the legally recognized *Pah Sa-nguan* is much larger

than the amount of land actually covered by forests. Nearly 70 percent of Thailand's remaining forests are in the North, where many indigenous and tribal peoples live. Estimates of how much of Thailand's total land mass is still forested vary widely. The RFD holds that as of 1988, over 28 percent of the Kingdom, or 14,380,349 ha, was covered by forest.¹⁰ Thai environmentalists, however, assert that the actual forest cover probably ranges between 10 and 17 percent.¹¹

Reasons for the discrepancy are both technical and political. Technical reasons include differing definitions of what constitutes forests and forest cover, as well as the difficulty in monitoring vegetative cover over the Kingdom's 51,311,502 ha. For example, some estimate that 14 percent of the Northeast is covered by forests.¹² The definition of forests relied on, however, probably includes areas designated as national parks and excludes smaller forests managed by communities.

The latter forests are sometimes classified as "degraded" because they do not contain enough high-grade timber to be profitable to logging operations. Biologists, by contrast, would not consider most of these areas to be degraded since they are often diverse secondary forests in the process of recovering from logging and agricultural activities. Similarly, local farmers do not consider these forests to be "degraded" because they are resource-rich areas integral to the agricultural systems that support their livelihoods.¹³

The official labeling of forests as "degraded" is often done with little, if any, empirical basis. Forest areas considered to be degraded may actually be intact (i.e., not degraded by any professional forestry definition), or they may be heavily logged or grazed (i.e., what a forester might call degraded). The term, therefore, is not often applied with any biological basis. Nor is it applied with any sociological basis: the perspectives of local people has no bearing whatsoever on the classification.

Instead, the classification of forest land as degraded that is applied enables the RFD to lease the land to commercial entrepreneurs and displace actual occupants.¹⁴ This situation, in turn, accelerates the conversion of natural secondary forests into plantations, a trend likely to be reinforced by a provision in the Forest Plantation Bill that extends coverage to degraded forests.¹⁵

Given its importance, an empirical definition of degraded is necessary. Degraded should not simply mean logged-over or cleared, no more than forest should merely refer to a certain number of standing trees within a given area. Instead, a forest should be considered as degraded only if it is not undergoing healthy and sustainable regeneration.

A countervailing political impulse -- more evident on the macro- or national-level -- prompts the RTG, and especially the RFD, to overestimate the extent of actual forest cover. An official overestimate allows the government a defense against criticism for failing to protect and rehabilitate large portions of the kingdom's forests. It likewise empowers the RFD to retain legal jurisdiction over the *Pah Sa-nguan*.

Despite differing estimates concerning the extent of forest cover there is a general consensus that Thailand is rapidly losing what remains of its forest resources. At the end of World War II, 70 percent of the kingdom was reportedly covered by forests. Assuming that the official -- and most favorable -- current estimate of forest cover is correct, 40 percent of Thailand has been deforested in a mere 40 years.¹⁶

C. Conservation/Protection Forests

The 1985 National Forestry Policy also provided for a system of land subclassification. Pursuant to that policy, 15 percent of the kingdom's total land area is to be subclassified as conservation or protection forests. Conservation forests include forest reserves that have been designated as wildlife sanctuaries or national parks, entities that contain most of the kingdom's remaining forests.

As of 1988, there were 31 wildlife sanctuaries encompassing a total of 2,470,054 ha. Fifty-nine national parks had been established that covered a total of 3,041,599 ha. An additional twenty-two parks, covering 1,136,543.5 ha, were pending approval. If the National Forestry Policy is fully implemented, 1,048,566 more hectares will be designated as conservation forests.

In addition, some protection forests may also be designated as Watershed 1A forests under a recently established watershed protection classification system. Many of these forests are located in Northern Thailand and are managed by local communities. Their classification as 1A watershed forests will add another layer of legal prohibitions on community management and use.

D. Economic Forests

The 1985 National Forestry Policy also provides that 62.5 percent of the *Pah Sa-nguan*, or 25 percent of the kingdom's total land area, is to be designated as commercial or production forests (hereinafter referred to as economic forests.) Designated economic forests should theoretically include severely degraded areas that have been targeted for rehabilitation. Eventually, the RTG plans for these areas to become the kingdom's primary source of wood and other products. A strategy reflected in the new Forest Plantation Bill.

Several official rehabilitation strategies are currently being implemented in areas designated as economic forests, the most prominent of which entails the establishment of commercial tree plantations, especially eucalyptus plantations. "Eucalyptus plantations receive generous incentives from the Board of Investment -- such as duty exemptions . . . and various tax holidays and tax exemptions for extended periods."¹⁷ As a result of these incentives, which are not extended to other crops, "all over Thailand, as world demand for wood chips soars, eucalyptus companies are being encouraged to rent large swaths of National Forest Reserves. In the last five years [1985-89] the area under eucalyptus has shot up from 136 to 1,100 square kilometers,

and in all, some 30,000 to 41,600 square kilometers may ultimately be taken over by private plantation firms."¹⁸

Unlike most other forest rehabilitation projects, eucalyptus plantations are capital, not labor, intensive. They are also encountering considerable resistance from local people since forest farmers consider eucalyptus to adversely affect water supplies, soil moisture, and neighboring crops.¹⁹ The establishment of the plantations also frequently results in the eviction of forest managers or creates a credible fear of eviction.

As a result of these developments, since 1984 when the RFD began promoting commercial tree plantations, "strong resistance, protests and violent confrontations between villagers and the authorities," have occurred.²⁰ The protesters do not merely oppose the plantations, they have offered an alternative. "Their message is simple . . . they want community rights to local forests which they will conserve themselves."²¹

These activities and demands are responsible, in large measure, for the new Forest Plantations Bill and the proposed community forest law.²² Nevertheless, these documents underscore the fact that most foresters and government officials still retain serious and stereotypical doubts about the ability of small farmers to conserve and sustainably develop the kingdom's forest resources. In Thailand, as in many other nations,²³ forest farmers are frequently blamed for forest destruction. Rarely are they recognized as contributors to forest conservation.

Many analysts, meanwhile, including organizations identified with the conventional forestry sector, acknowledge that a major cause of deforestation in Thailand and elsewhere lies in logging activities sanctioned by national governments.²⁴ Forest are viewed as a source of foreign exchange and are tapped in order to maintain the political strength of the ruling parties, not for state programs or the poor rural majority.

Amidst growing public outcry over the rapid depletion of the Thailand's forest resources²⁵ and widespread allegations of corruption and malfeasance in the conventional forestry sector, an emergency logging ban was enacted by the RTG and went into effect throughout the kingdom in January 1989.²⁶ The ban has theoretically terminated logging activity within the *Pah Sanguan*.²⁷ But securing legal rights to harvest forest resources continues to be a lucrative endeavor for land speculators, including many foreign investors.²⁸ The tourist industry boom of the 1980s further intensifies competition for acquiring state-sanctioned legal rights.²⁹

II. Local Forest Management in the *Pah Sa-nguan*

A. Individual and Community Forestry

Humid forests in the tropics have provided local people with life-sustaining agricultural output for thousands of years. In Thailand, forest grove and other traditional agroforestry systems have not been well documented.³⁰ At the same time, the official forest zone of Thailand provides sustenance to more than 10 million people.³¹ The *Pah Sa-nguan* teems with fields of rice, pineapples, cassava, kenaf, maize, and cabbages. In addition a growing number of golf courses, vacation homes, orchards, thousands of villages, and even district capital cities are located with the *Pah Sa-nguan*.³² Even within the official borders of national parks, rice fields, cabbage patches, pasturelands, and resort homes can be found. Farmers and other entrepreneurs extract firewood, mushrooms, other minor forest products, timber, and game.

Many policy makers and other elites in Thailand continue to claim that people in the *Pah Sa-nguan* are the primary agents of forest destruction, a viewpoint reflected in various policies and studies. A typical, and recent, assertion is that forest dwellers and others dependent on forest resources "are locked in an economic way of life that depends on complete destruction of the forest for income to feed their families."³³

The common belief that small-scale farmers are enemies of the forests is a gross oversimplification that is fostered by the failure of outsiders to appreciate the antiquity and sophistication of traditional forestry management systems.³⁴ A by-product of this belief is that national laws sanction farming in the *Pah Sa-nguan* only if local people follow RFD plans for rotational cutting, plantation establishment and maintenance, protection, timber licensing, and agroforestry.³⁵ These laws completely overlook the by now, well-established fact that there are many indigenous agroforestry and forest management systems that are sustainable and already in place in the *Pah Sa-nguan*.³⁶

Indigenous forest management systems in the *Pah Sa-nguan* include:

- forest groves adjunct to field crops,
- rotation swidden systems,
- long fallow swidden systems,
- in-field agroforestry,
- agrosylviculture, and
- adaptations of government forestry initiatives.

Although some of these systems, which are described below, are operated on individually-held lands, forest groves, sylvopastoral systems, and waterway-side forests are usually managed as

"community forests," i.e., regulated and protected by communities³⁷, be they user groups, villages, groups of villages, or subdistrict-level groups. Traditional community forests have not been initiated or established by any government agency.³⁸ Nor has their existence been widely recognized by the government.

B. Community Forest Groves

At the most subtle end of the management scale are groves that involve selective protection and minimal interference. Few reports of this type of "jungle farming" are found in the literature - either in Thai or foreign languages. People engaged in "jungle farming" in northern Thailand selectively harvest and protect useful species where they occur naturally, particularly greens, bamboo, fruits, and "wicker".³⁹ In similar, better-studied situations around the world, it is known that this kind of knowledge is used to manipulate the densities and distributions of native species within the forest.⁴⁰ It is highly likely that this type of management is common in Thai forests as well -- particularly in recognized forest groves, but also in what are commonly perceived to be wildlands. A variety of grove systems have been documented, but management regimes are not well described.⁴¹

Watershed groves are perhaps the most easily recognized type of adjunct grove. Rice paddy farmers of northern Thailand are justly famous for their sophisticated and ancient irrigation systems.⁴² Northern Thailand is one of the world's centers for rice diversity.⁴³ A watershed forest is valued as a protection for springs, a place to collect bamboo shoots, vegetables, mushrooms, etc., dead wood for firewood, herbal medicines, and as a grazing area for village livestock.

Excavations at Spirit Cave indicate that rice and fruit cultures occupied the area as early as 6000 BC.⁴⁴ Traditional irrigation systems, associated with water-user management organizations, date back to at least 1200 AD in Northern Thailand.⁴⁵ In Central Thailand, the Khmer high civilization (200 to 1200 AD) transformed lowland forests into intensive wetland agricultural fields, yet every town maintained a grove.⁴⁶

Though often overlooked, maintaining forests to protect the sources and flow of irrigation water is integral to water management. Forests are an integral part of the larger agroecosystem from which rice farmers make a living because they provide ecological services and useful products. From forests near their communities, farmers harvest a variety of non-wood forest products, including food, medicines, and craft materials, as well as construction materials such as bamboo.⁴⁷ Harvesting is regulated in order to maintain the forest cover necessary to protect the watershed.

A typical case of watershed forest management is in Ban Pae, a village located on the edge of the Mae On National Forest in Chiang Mai Province. Ban Pae recently received an award from the Chiang Mai RFD regional office for its protection of a watershed forest which technically lies within the *Pah Sa-nguan*.⁴⁸ The village was formally established in 1933, but local

residents claim that their great grandfathers established claims over 90 years ago. According to the RFD, agricultural lands of the village cover an estimated 208 ha (1300 rai), including 128 ha (800 rai) of watershed forest.

A village forest protection committee enforces the regulations. Villagers watch for illegal activity; a committee of villagers is responsible for patrolling at night and for arresting and fining violators. All villagers are also responsible for fighting fires and periodic work details maintaining the forest. The RFD, in contrast, has planted fast-growing trees, especially eucalyptus, which villagers do not find useful within the watershed forest, but villagers have no say in this management decision.

Karen villages maintain watershed forests as part of an agricultural system that includes paddy terraces and upland swiddens. In a typical Karen village such as Ban Om Long in Hod District of Chiang Mai province, a body of elders traditionally regulated forest use. Today the elders often coordinate with a government-appointed committee, but their activity is technically illegal, and the RFD can unilaterally make management decisions in opposition to the elders.⁴⁹

Lua' farmers maintain forest groves as an integral part of their agricultural system⁵⁰ in addition to the sacred groves near their villages. Forests on ridges, along streams, and between blocks of swiddens are left uncleared, since they are considered community property. Lua' recognize that these uncut forests are necessary to control erosion and as sources of seed for the reforestation of fallow.⁵¹ Lua' elders recall their fathers' stories of Lanna (north Thai kingdom) princes talking to them about soil and forest conservation when they presented their annual tribute payment of forest products.⁵²

Newer arrivals from other ethnic groups also maintain forest groves. Some Akha, for example, maintain forest groves as "game reserve, medicinal storehouse, and wild vegetable garden, [as] . . . a canopy for tempering the microclimate . . . [to] break the storm winds, and provide a refuge from marauding bandits."⁵³ Akha forest groves may be adjacent to the village or well away from it.⁵⁴ In addition, the Akha maintain watershed groves from which it is taboo to remove anything.

Paddy farmers are now proclaiming their watershed forests as "community forests" to correct outsiders' misunderstanding of their land use systems (i.e., the assumption that farmers were only long-term occupants of house lots and rice fields). Hill tribe paddy farmers, however, have been stymied in their efforts to proclaim community forests because they generally live within protected areas, such as national parks, wildlife sanctuaries, and areas designated as Watershed 1A. In effect, hill tribes have been punished for their protection and conservative use of forests -- their lands have been declared protected areas, and they are denied rights of residence or maintenance.⁵⁵ In addition, the government does not support the local committees' rights to arrest those cutting down trees in the community's watershed forest.

Adjunct forest groves are also common in the Northeast. Agricultural systems have developed around more limited water resources, and farmers recognize the importance of tree cover in

maintaining soil moisture and water resources. Until recently, they mostly farmed lowland areas between forested uplands, but logging, resettlement from dam projects, and government policies promoting agricultural expansion triggered a massive movement of people into areas that had been lightly populated during the 1970s.

Dryland crops now predominate in previously forested areas, particularly crops grown in response to export incentives (e.g., cassava, maize, kenaf). Paddy rice is also grown where water is available, and swidden upland rice fields are planted in some areas. Although farmers may traditionally have relied on larger expanses of dense upland forests, today the adjunct forest groves of the Northeast are mostly remnants of forests cut over by concessionaires⁵⁶. They are now listed as "degraded" by the RFD (legal category "*pah seuamsoom*").⁵⁷

Two typical not-long-established settlements in the Dong Mun reserved forest near Kalasin are Ban Phu Hung and Ban Non Amnuay.⁵⁸ They grew following the flooding of the nearby reservoir and subsequent establishment of RFD "forest village" programs. In addition to more settled farmers that grow rainfed paddy, the population includes a large element that depends on the reserve forest for swidden-cash cropping (largely cassava), making charcoal and timber sales. 74 percent of the land is agricultural, 22 percent forest, 2 percent residential, and 2 percent water, though residential areas often include agroforestry plots.⁵⁹ The remaining woodland patches (adjunct groves) are still rich in species (222 total, 92 of which are trees), but because the large trees were removed by logging companies with RFD concessions, they are now considered to be "of low economic quality," by government foresters.⁶⁰ On the other hand, 86 percent of the forest vegetation is classified as "forest vegetables," indicating a "rich source of free vegetable supplies to farmers." In addition, many medicinal species are harvested and traded by middlemen who distribute them throughout the country.⁶¹

Other more recent settlements near Nakhon Ratchasima on the border of Tab Lan National Park rely on forests in a similar manner.⁶² Surveys in Khok Sanga and Thung Sawang near Phu Kheio in Chaiyaphum province, in Soeng Sang District near Nakhon Ratchasima, and in the Dong Mun forest area in Kalasin District, revealed that a full one-half of annual household consumption needs are being met from forest products, either directly or from cash derived from their sale.⁶³ Major products included mushrooms, bamboo, thatch, honey, firewood, and charcoal. The smaller the landholding, the greater the dependence on forest products, but even large holders depend on forests for 15-35 percent of their consumption needs. In the Phu Wiang Valley west of Khon Kaen, 80 percent of the families consume forest products regularly, and the sale of forest products accounts for 10 percent of income. Among other things, therefore, access to forest resources contributes to the health of village members and reduces the incidence of malnutrition.⁶⁴

These statistics highlight the importance of the remaining northeast forests to local people and provide a valuable insight as to why many northeastern villages are demanding legal recognition of their rights to their community forests. Historically, the people of Isan in the Northeast managed three things communally: wells, forests and temples.⁶⁵ One expert estimated that the average Northeastern villager maintains 80 ha of woodland per village to protect spirits and

produce mushrooms.⁶⁶

In southern Thailand, there are basically two types of agriculture, one within the interior forest lands (largely rubber plantations) and the other near coastal mangroves. Forest groves are maintained next to rubber plantations in Songkla Province. In some cases, villagers have sought assistance from the RFD to protect their traditional community forests by having them declared as wildlife sanctuaries. Informal agreements between local RFD officials and villagers allow farmers to continue to extract forest products for subsistence purposes and provide for joint protection of forest resources from outsiders.⁶⁷

Farmers near the coast recognize that mangroves are a functional part of their agroecosystem. Significant information on the management of mangrove forests was also not available, but farmers have recently moved to proclaim mangroves "community forests" so as to prevent their destruction by charcoal concessionaires. (See Part III below).

The sacred grove is often an adjunct to agricultural enterprises, although the removal of living things from some of these sanctuaries (*khet aphai than*) is technically forbidden.⁶⁸ Some sacred groves are funeral forests, or "grandfather forests," housing the spirits of ancestors.⁶⁹ The management and frequency of groves, as well as their importance within the *Pah Sa-nguan* are not well known. Many groves are associated with Buddhist temples and provide quiet, natural settings for meditation.⁷⁰ Most are generally smaller than one square kilometer, but they often harbor rare species. They have a long historical tradition; the Mon-Khmer maintained such sacred groves in their ancient cities.⁷¹ Sacred groves do not meet the needs of forest managers for firewood or minor forest products.⁷² Their presence, however, manifests a strong cultural understanding that trees are critical to the ecosystem, an understanding reinforced by other folk beliefs and by Buddhism.⁷³

Some adjunct forest groves in the public forest zone are new. In some cases, they have been planted by the RFD as plantations and are utilized as adjunct forest groves by resident farmers. In others, the groves were planted at the initiative of villagers. In the mountains of the lower North and other areas, forests were clearcut during the government's efforts to destroy the insurgency, and villagers were subsidized to monocrop maize. Villagers have planted stands of pine trees around their temples in order to reinstate the sacred grove.

C. Rotation Swidden Forest Management

Rotation swidden systems are used primarily by farmers living in permanently settled villages, typically people of northern Thai, Karen, and Lua' ethnic groups. In Chiang Mai province, 70 percent of the highland population uses this type of system.⁷⁴ Rotation swiddens are part of integral agricultural systems that generally include upland swidden fields, including fields in fallow containing secondary forest, paddy, mature forest groves, and in some cases, miang or other agroforestry plots. In this type of swiddening (common in many of the world's tropical forests), the swidden fields are not abandoned; instead, they are farmed in a way that maintains

and uses the forest to renew the field plots for use at regular intervals.⁷⁵ The fallow period is traditionally nine years in the Karen and Lua' versions and shorter among ethnic Thai,⁷⁶ but variation depends on land available to the community as well as other factors.

The "short cultivation-long fallow" version practiced by the Karen and Lua' is commonly found in northern Thailand at altitudes above 700 meters in dry evergreen or mixed deciduous forests.⁷⁷ Crops grown include rice, maize, sorghum, millet, chilies, beans, manioc, taro, sesame, and herbs. Field preparation techniques contribute to the stability of the system.⁷⁸ The field is cleared by slashing the secondary forest. Some of the standing trees are pollarded. The slash is carefully burned. Contour lining of slopes is done with logs. The field is then planted and weeded three times.

After harvest, the field is left undisturbed until the next cycle. The secondary forest that develops in fallowed fields is useful in terms of its products as well as its ecological services in restoring fertility. Firewood and a wide variety of medicinal herbs, foods, construction materials, and other useful plants and wild game are harvested from the fallows.⁷⁹ Livestock is allowed to browse there. Cultivation and fallowing practices prevent grasses from becoming established that would hamper regrowth. A study of the soil and forestry conservation aspects of this system⁸⁰ led to the recommendation that "hill people should be taught to systematically adopt the conservation practices which have allowed people like Lua' hill villagers to remain in settled villages, dependent on upland cultivation of the same fields on a regular cycle, for hundreds of years."⁸¹

In the northern Thai version of short cultivation-short fallow farming, secondary forest is comprised primarily of shorter trees and shrubs.⁸² Use rights may be maintained by individuals, may revert to communities, or may be abandoned after use. This system is practiced primarily in mixed deciduous or dry Dipterocarp forest at altitudes below 1,000 meters. The number of people engaged in this type of farming has probably increased since 1964 when an estimated one million people in north Thailand were engaged in swidden.⁸³

Short fallow systems are found outside the North, as well. Prior to the opening of the Northeast and the subsequent agricultural expansion in the region (circa 1955), long-established villages in the northeastern lowlands were growing paddy and sugarcane. Long-term occupants in the heavily wooded hills of the northeast were practicing highland livelihood strategies similar to their counterparts in the North. They gathered scented wood and lacquer for sale in markets and practiced swidden agriculture to produce upland rice, tobacco, chilies, and taro.⁸⁴ These systems presumably were rotation swiddens, although they have not been well described.

D. Long Fallow Swidden Forest Management

Long fallow swiddens are traditionally practiced by peoples who migrate long distances to farm. Long fallow systems have given rise to negative images of "hill-tribes" who slash and burn the forest to create "swiddens" that are abandoned after they are no longer productive.⁸⁵ Most long

fallow practitioners have been in Thailand for fewer than 100 years;⁸⁶ they are also a minority of the Thai "hill tribe" ethnic groups. Long fallow swidden users include Hmong, Lahu, Lisu, Akha, and Haw.⁸⁷ Many of these people are linked to trading systems and are not committed to long-term production of their subsistence from the land and forest. "Land is viewed as a relatively free, consumable good."⁸⁸

In the past, farmers using long fallow systems often produced opium for sale. The disturbed patches were not large and, typically, were found at elevations above 1,200 meters. Fields were clearcut of all trees and cultivated for up to five years before they were abandoned.⁸⁹ Cultivation techniques included deep hoeing, clean cultivation, removal of stumps, farming of ridge tops, and uncontrolled burning.⁹⁰ These techniques lead to soil erosion and severely limit the ability of the forest to regenerate. Farmers often abandoned the land, which then became covered with grass and remained unproductive for generations. Given the availability of propagules from nearby forests and enough fallow time, however, cleared forests can regenerate.⁹¹

Resource mining of the long fallow type is increasingly used today by lowland Thai and other highlanders who are taking advantage of opportunities to make quick money with little investment through contract farming in unclaimed forest areas. (See Part III.)

E. In-field Agroforestry

Thai farmers have developed a wide variety of indigenous agroforestry systems, including one that mixes trees with other crops temporally and spatially. These systems have not been widely recognized by outsiders for two reasons: they don't conform to the agroforestry patterns promulgated in research stations,⁹² and they may appear semi-wild because they often integrate native species.⁹³

Rao's 1989 survey of Thai agroforestry initiatives⁹⁴ documents a national sampling of 50 agroforestry plots.⁹⁵ At one end of the range are diverse mixtures of introduced trees grown under native canopy (such as jackfruit and mango under *Shorea spp.*, *Dipterocarpus tuberculatus*, and *Xylia kerrii*). Other examples are more conventional, such as kenaf among clumps of native *Sindor siamensis* trees or mixtures of guava, jackfruit, kapok, and sugar apple intercropped with maize or cassava. Rao's survey includes silvofishery systems, such as native mangroves planted around shrimp ponds and casuarina planted between fishery ditches.

Agroforestry plots are particularly well developed in houselots in the Northeast.⁹⁶ Farmers typically don't plant native trees but allowed them to grow wherever they sprouted naturally; people had "no interest in planting forest trees on their land, especially the species recommended by RFD."⁹⁷ In general, agroforestry plots do not follow regular patterns, although multiple species for food, shade, and other uses were integrated. This lack of a regular pattern led researchers to conclude, "the system has not been domesticated by rural farmers in the forest communities."⁹⁸

Forest trees are also typically found in paddy fields in northeast Thailand.⁹⁹ Some are survivors from the original forest, while others originated from natural regeneration or were planted or transplanted on dikes and mounds. These trees are generally maintained for bean poles, food, fuelwood, animal fodder, medicine, construction, and utilitarian items. This system is particularly well developed in areas where farmers no longer have any access to natural forest.

Miang (fermented tea leaf) farmers of north Thailand have managed wild tea gardens for centuries¹⁰⁰ within what are today designated as forest reserves. Wild tea is cultivated under an open canopy of native forest trees. Canopy usually ranges from 30 to 50 percent shade.¹⁰¹ Tea gardens are established by clearing undergrowth around wild tea trees and are expanded by transplanting individual seedlings under forest canopy. Thus a garden may have an irregular shape, winding through the forest following natural distribution of tea trees, or it may be an expanding island within a larger block of forest. It may be easily identified as a tea plantation or it may appear to be forest.¹⁰²

A typical plot of miang¹⁰³ contains 20-300 individual trees per rai, representing 60 tree species.¹⁰⁴ Firewood, fruits, construction material, medicines, and other nonwood forest products are harvested from the tea agroforestry plots. In addition, buffalo and cattle browse in the shade. Patches of mature forest (or what remains after logging concessionaires have worked an area) separate the tea gardens of different villages. Patches of forest are also generally found on the steepest slopes farthest from the villages. Miang gardens are managed by ethnic Thai and other mountain peoples, including Karen. When miang prices drop, farmers switch to processing the tea leaves as green tea. Farmers are adapting to rising fuelwood prices by adopting more fuel-efficient stoves for steaming miang.

F. Adaptation of Local Forestry Initiatives

In addition to many standard government-sponsored programs (briefly described in Part IV, B.), the royal family and other sponsors have undertaken numerous pilot projects.¹⁰⁵ Approximately 100 such projects are currently in operation, including all donor-sponsored agroforestry efforts. The most successful ones have been implemented with the active participation of people living within or near the project sites. Some of these projects attempt to incorporate and promote indigenous agroforestry.

For example, the Thailand Upland Social Forestry Project in the watersheds of Chiang Mai province, includes an innovative process of participatory land use planning that builds on present land uses, including existing community watershed forests.¹⁰⁶ In the Ban Pang Khum pilot project in Samoeng District, external project implementers have helped Karen and Lisu communities protect traditional conservation forests while introducing new agroforestry and other land management techniques. The process involves providing local people with aerial photos and scale models of their sites to facilitate discussion of site-specific problems, violations of conservation regulations, etc. and providing information about alternative land use options. It

likewise encourages dialogue among villagers and between villagers and researchers and extension agents. The RFD's nearby Samuun Highland Development Project is attempting to replicate this model on a larger scale.

NGOs have promoted in-field agroforestry in environmentally sensitive areas. The Project for Ecological Recovery (PER) and Mountain People's Conservation and Development, for example, have promoted alley cropping in an Akha village located in a watershed area in Chiang Rai province. The Akha farmers want to learn how to increase production without cutting down their traditional forest groves. Building on this pilot project, PER has coordinated workshops that share information and experiences among NGO workers. Many NGOs often rely on universities for information about appropriate technologies.¹⁰⁷

Predictably, farmers and communities have responded differently to different programs. Forestry stabilization and expansion have resulted from these programs in which implementers shared information with farmers, listened to farmers, and modified existing programs to facilitate problem solving by communities and provide information, training, and seedlings in response to community requests.

III. Adaptations to Competition in the *Pah Sa-nguan*

Indigenous agroforestry systems have proven sustainable for hundreds of years, in part because of their capacity to adapt to stress and change. Today, new pressures are leading to new adaptations. Current stresses include:

- commercial pressures to abandon conservation practices,
- outsiders' efforts to take over village forests,
- reforestation programs,
- population growth and agricultural expansion,
- concentration of land holdings,
- resettlements and migration, and
- pressures to adopt modern systems low in biodiversity.

Two themes run through the story of adaptation to these stresses: communities are resisting deforestation, and insecure tenure hampers that resistance. The current ambiguous open-access situation magnifies, or creates, these pressures and weakens the ability of indigenous agroforestry systems to adapt in ecologically sound ways. The stresses would be reduced if tenurial rights were recognized and protected.

A. Commercial Pressures to Abandon Conservation Practices

As of 1990, stakeholders and actors in land management in the *Pah Sa-nguan* included farmers resident on the land, local elites who gain cash profits from the short-term exploitation of forest resources, foreign investors also seeking short-term profits, the military which is concerned about long-term pacification of the rural sector, the monarchy which is striving to promote the welfare of the Thai people, and the RTG which wants to maintain the base of rural livelihood and seeks both short- and long-term economic gains for its own coffers.

Thailand is increasingly integrated into the world market system, which results in increased pressure to achieve short-term profits. Farmers acknowledge these pressures as they discuss the future of their community forests. Some of the most severe pressures result from contract farming, which is often promoted by middlemen, especially those connected with foreign markets.¹⁰⁸ Farmers borrow the inputs up front and are guaranteed prices for their products. They clear swidden plots in forest areas, outside their usual lands and often outside their community forests. This arrangement enables the farmers to take advantage of contract farming profits without worrying about the degrading their own land.

Lack of tenure and lack of official recognition of community forests severely weaken community efforts to protect forests from such encroachment. For example, in Ban Om Long, Hod District,

Chiang Mai province, the community arrested a Hmong man for clearing forest in a watershed forest in order to plant cabbages. In addition to being a community forest, this forest is officially designated as a Watershed 1A area, and it is illegal to fell trees there. But district police refused to handle the case or follow up on preventing the deforestation.¹⁰⁹

Public attention to the problems caused by contract farming has focused on cabbage being grown on Doi Inthanon near Chiang Mai.¹¹⁰ Cabbage farming by Hmong on upland slopes is destroying the watershed forests of 90,000 villagers of Chom Thong District. Villagers and monks joined to form the Club for Watershed Areas Preservation of Chom Thong District (headed by the traditional dam masters in the area) and worked to stop deforestation by the Hmong. Initial efforts included fencing off areas and planting trees in cabbage fields.¹¹¹ The lowlanders blame foreign crop substitution projects for the problem as much as they blame the Hmong. They have negotiated an agreement that the Hmong must return to the 128 ha (800 rai) that the development project originally allocated to them or move down to a resettlement site that the RFD prepared for them. Villagers threatened that if the Hmong did not abide by the agreement by December 1990, they would take matters into their own hands. In the words of one RFD official, "at that time, only the Army will be strong enough to stop them."¹¹² The media has generally portrayed this controversy as a "hill tribe" versus "villager" conflict.¹¹³ The villagers of Chom Thong, however, acknowledge that they have no quarrel with the Karen.¹¹⁴ Concerned villagers are focusing on maintaining proper forest management. As one villager put it, "the forest is most important for our survival. The forest is our second parent. We have to end the deforestation before it ends us."¹¹⁵

Villagers also respond to windfall profits from land sales that impact on intra-community tenurial patterns and lead to changes in community forest management practices. Most villagers are unable to acquire an official title that recognizes their land rights, but wealthy real estate speculators often have the means to obtain full titles, a process that greatly increases the value of the land.

Pressures to take short-term profits often prompt villagers to cut timber or capitalize on other wage-labor opportunities that degrade the local resource base. For example, some well-to-do people who want to build resort homes pay rural farmers to degrade forest lands so that they can then be leased from the RFD. Through illegal means, bogus titles are often secured.

This problem is not limited to outsiders' profiting from the villagers' degradation of village resources. Within villages there are also pressures to reduce community forests in order to secure short-term profits. For example, anthropologists have documented the shrinking of forest groves over the past 25 years in Ban Ping, an ethnic Thai (Lue) village. The groves that once surrounded the village have largely been replaced by orchards, gardens, and plantations. "What had been a biologically valuable reserve, a common resource, community symbol, and village gathering place is now largely the private property of a few ambitious and clever individuals whom the majority of villagers resent but have no way of controlling."¹¹⁶ Lack of officially recognized tenurial rights to the groves contributed to their demise. But despite the pressure to privatize grove land, a forest grove still exists -- a sign of the strength of the traditional concern

for maintaining forest groves as an adjunct to agricultural enterprises.

Recognizing that their forest groves are becoming too small to be sustainable, some villagers have moved to renew them. The case of Ban Siao is instructive. Ban Siao was founded early this century in Si Sa Ket province in the Northeast. Forty years ago, villagers realized the negative effects of cash-crop encroachment on their community forest, and they decided to allow their community forest to regenerate by not planting any more kenaf and cassava.¹¹⁷ But the RTG interfered in this process of adaptation of the grove system to cash crop introduction. In 1971, Ban Siao was incorporated into a forest reserve. In the words of the Ban Siao headman, "it would have helped a lot if the officials had visited us first, asked us what the situation really was, and then classified the forest area in a realistic manner This is our forefathers' property, but we have no say in what can be done here, not to mention any chance to benefit from it."¹¹⁸

In the 1980s, the RFD granted a concession to the area for commercial reforestation with eucalyptus. In response, the villagers uprooted the eucalyptus seedlings and burned down the RFD office that granted the concession. They now protect the naturally regenerating forest, but worry about the future because they still have no legally recognized tenure rights, and the 15-year eucalyptus plantation concession is still active.

The profit-making potential of biodiversity is frequently touted as the key to saving the world's biodiversity, but observations in the field raise major questions about the outcome of this strategy.¹¹⁹ A single example is the exploitation of amphibians and reptiles for their skins. Villagers in the Northeast are collecting toads for cash. In one village alone, middlemen toad-skinners received orders for 100,000 toads in 1988, but the villagers were only able to collect 20,000 in 1987.¹²⁰ In this type of situation, no traditional limits have evolved because the resource was not heavily exploited in the past.¹²¹ For this reason it is particularly unlikely that the system will have time to adapt to the new stress. The way in which the high economic value of teak led to the deforestation of Thailand is a more obvious example of the impact of profit-making on biodiversity.

The ecological impacts of short-term profit-taking are difficult to incorporate into the cost-benefit analysis used in commercial ventures once they are "externalities" borne by someone outside the profit loop. This inherently myopic vision of commercial economies has contributed to the perception that development and environment are at odds, yet must somehow be reconciled if growth is to be sustained.

In subsistence economies, societies have learned about the long-term impacts of short-term gains, and systems of resource use have evolved to prevent destruction of the resource base. Long-time rural residents recognize that nature is providing their economies with a renewable subsidy; natural processes are protected as resources.¹²² This ecological wisdom is built into the "moral economy" of many rural peoples in Southeast Asia.¹²³ Recent accounts of the community forest movement in Thailand include assassinations, armed confrontation with government, and statements such as: "It is worth dying for, if it can save the forest for future generations."¹²⁴

Although commercialization of biodiversity may be avoidable, it is unlikely that other commercial stresses will go away. The best hope lies in strong national support for forest management by communities during the rapid industrialization of Thailand. During that transition, forest communities should be encouraged to use their experience, their location, their knowledge about ecology and subsistence insurance, and the strength of their moral economy to ensure that forests are preserved. Evidence that these capacities exist has been found in many places. The community of Ban Thung Yao, Lampoon Province, provides one such example.¹²⁵ Economic development has brought alternate employment opportunities to the farmers of Ban Thung Yao. In response, the farmers have moved to enlarge their community forest and regulate it more closely. They understand the importance of the forest for subsistence insurance and for its ecological services. They also understand their duty to future generations to utilize the forest sustainably.¹²⁶

B. Outsiders' Efforts to Take over Village-managed Forests

Both public and private entities are moving to consolidate their control over village forests and convert them into capital for themselves. Lack of secure tenure makes this a significant threat to community forests. During World War II, Thailand terminated European concessions and in 1947 created the Forest Industries Organization (FIO) to use logging concessions to generate capital to consolidate the power of the new politico-military elites.¹²⁷ The parastatal Thai Plywood Company was established in 1951.¹²⁸

The 1964 policy that 50 percent of Thailand was to be officially designated as *Pah Sa-nguan* consolidated the control of the state over the forest land. In many areas, it also justified the negation of land rights and claims of forest dwellers and forest users. Public forest status was imposed not on a wilderness, but on forests occupied and managed for centuries by millions of people. The administrative arm of the government, however, did not move quickly to gazette, survey, and mark these reserves or to inform the inhabitants of their official tenurial status. The central government largely left the populace to carry on with existing land use practices, while it used the policy to justify licensed logging. By 1968, logging concessions covered one-half of the country.¹²⁹

By the time the population growth and agricultural expansion of the late 1960s and 1970s occurred, forests were reduced to a shadow of their former grandeur. The area of logging concessions and the amount of timber export, however, are more closely correlated with deforestation than is the population increase.¹³⁰ In 1979, the government reduced the number of logging concessions by half, but the amount of timber harvested from these concessions rose from 2.6 to 3.1 million cubic meters after termination.¹³¹ Concession regulations mandate careful rotations, watershed protection, and replantation, yet these rules were often openly ignored.¹³²

The 1964 Forest Reserve Act (described in Part IV) is another manifestation of outsiders' efforts

to alienate villagers from forest management decisions. Local politicians (known as "influential persons," in Thailand), many of whom are also local businessmen, and the local staff of government agencies,¹³³ the police, and the military, have cooperated in these efforts to their mutual benefit. At the local level, the impacts of these interest groups cannot be separated.

For generations, villagers have had no control over logging concessions within their forests. Concessions were granted by the government in alliance with local politicians and the military. But villagers' resistance to these concessions increased as forests shrank and traditional irrigation systems were damaged by logging in watershed forests. Just prior to the logging ban of 1989, villagers' protests finally reached a crescendo as networks of villagers all over the country worked together to stop logging in their community forests.¹³⁴

But logging is not the only means by which outsiders usurp village forests. Sometimes the process includes alienation of village forests through their inclusion in areas designated as national parks and wildlife sanctuaries. According to Thai law, villagers are liable to be evicted from these areas.¹³⁵ In some cases, the land and forest resources are then put to other purposes which all too often provide no direct benefit to the local communities.

The effects of Thailand's current boom can be found in Tung Salaeng Luang National Park in Phetchabun and Phitsanuloke provinces. On the border of this park is Ban Thung Samo, a village settled 200 years ago but now located in reserve forest.¹³⁶ During this century, the population grew through a resettlement program carried out by the military. The area is now touted as "the Switzerland of Thailand" because parts of it were converted into dairy farms after the military deforested the area. Little forest remains; yet reserve forest markers have been set up in corn fields.

Five years ago, people in a nearby area were moved out after being told the area was to become a national park. Instead, the land was sold to a real estate company with Japanese connections to create a golf resort. The original residents are now petitioning to have their land returned to them. The residents of Ban Thung Samo are worried that they will be forced into a "forest village" program like residents in another nearby area or that their land will be confiscated for tourist business. Meanwhile, big companies are buying up land from villagers.¹³⁷

The recent effort to extend the protected area system to include 15 percent of the land area has led to the inclusion of still more villages inside national park boundaries. The case of Ban Bhong Tum is typical of the treatment that villages have received. Ban Bhong Tum was settled in 1845. The cultivated lands, the traditional irrigation system, and the forests of Ban Bhong Tum in Wang Nua District of Lampang province were incorporated into Doi Luang National Park in April 1990. Although by law villagers have 90 days to protest, the village was not notified of the demarcation until the deadline had passed. Notification came through a candidate campaigning for election, not through any official channels. Villagers were not consulted during the demarcation decision, nor were district-level officials informed of the demarcation either.

Five of the affected villages, including Ban Bhong Tum, formally filed a protest in August and were still awaiting a response as of November 1990. Although some agricultural land is covered by No So Sam, Sotoko, and Sokonun SK-1 certificates, most villagers believe that government titles are irrelevant; they have lived here a long time and know who owns what land according to their own traditional laws. The community claims a community forest of more than 960 ha (6,000 rai), which protects the watershed of their irrigation system. They have protected the forest from illegal logging by outsiders regardless of the outsiders' political clout.¹³⁸ A village sign posted by one of the water sources now incorporated in the national park states, "Hard work brings a good life."

The RFD also continues to expand the borders of official reserve forests into private agricultural and community forest land. For example, in November 1990, in Chiang Khong District in Chiang Rai, villagers who have cultivated their lands for 100 years in four subdistricts demanded that the recent declaration placing their lands inside forest reserves be revoked.¹³⁹

Developers want village forests to be converted to reserve forests, and villagers fight it whenever they can. For example, in Nong Khai province, forests used over many generations as the grazing lands of 14 villages have been deforested under a land development scheme allegedly carried out with the cooperation of a village headman. Provincial authorities accepted villagers' demands that legal action be taken against the encroachers and the local officials who illegally granted the land development permits.¹⁴⁰ Golf courses have also encroached on forest lands.¹⁴¹ One businessman predicted that Thailand needs 1,000 golf courses to meet foreign demand.¹⁴²

Outsiders' efforts can be local in scale, but the combined impacts of local efforts often impact forests over an entire region. Land speculation around Chiang Mai, for example, has had a significant impact on the region's forests. In Ban Pae (described above), an outsider has purchased a large holding next to the community forest and is slowly expanding into the forest perimeters. Villagers are not taking any action, but they are acutely aware of the political game being played.

In Ban Huay Kaw, the impact of influential politicians is graphically demonstrated. A major new development, billed as "the twin city of Chiang Mai," is planned near Ban Huay Kaw in Sankampaeng District. A local Member of Parliament (MP) who owns several businesses has purchased approximately 10,000 rai in this area. A wide highway was recently built past Ban Huay Kaw, and several resort and golf course developments can be seen along the new road. In February 1988, the MP's wife rented 37.6 ha (235 rai) of "degraded" forest in the Mae On National Forest from the RFD, ostensibly for a reforestation project, for an annual fee of 20 baht per rai.¹⁴³ The forest that was rented lay within the community forest of Ban Huay Kaw, a village of primarily landless and small holders who work in the fields of Ban Mae Tao Din, within whose watershed the Ban Huay Kaw community forest lies.

The Ban Huay Kaw residents relied on their community forest for food and other products necessary for survival. When the bulldozers began work in April 1988, Ban Huay Kaw villagers

protested, blocked the bulldozers, and asked that the lease be canceled. The official response was that the 1964 National Forestry Act allows the private sector to lease denuded land for planting trees. The site was partially cleared and fenced, and some mango, bamboo, and teak were planted. Villagers were worried that the site would be developed into a golf course and resort, and they sought the aid of students at Chiang Mai University. The students persuaded Kesetsart University to conduct a survey to determine if forest areas that had not yet been bulldozed were indeed "degraded." The study found that it was not. Students and villagers moved to occupy the site in July 1988. At this time, one of the protest organizers was told that a price of 12,000 baht was on his head.¹⁴⁴

The residents of Ban Mae Tao Din had also become upset by the damage done to their traditional irrigation system by the erosion and runoff of debris resulting from deforestation in their watershed. But laborers who wanted to continue working and the police eventually forced an end to the occupation. In August, the villagers sought the help of the PPP, (Counter-Corruption Commission). It found that employees of the MP's wife had cleared an area greater than granted by her lease. Her arrest was ordered, but she had already arranged a trip abroad.

In November 1988, villagers and students again occupied the site and were arrested. On December 15, more than 2,000 people demonstrated at the Chiang Mai airport to draw the attention of the Prime Minister who had come to Chiang Mai and to demand the release of the detainees. On the same day, a villager active in the resistance was assassinated, an event which triggered an even larger demonstration by the Chiang Mai group and a demonstration in Bangkok. On December 25, 1989, the RFD Director General declared the forest of Ban Huay Kaw an official community forest -- the first community forest ever recognized in a Watershed 1A area.

Events took an ambiguous turn shortly thereafter. The local RFD staff refused to recognize the community forest. Instead, they offered an alternate site to Ban Huay Kaw, one that is unacceptable to the villagers by virtue of its distance and the fact that it is hard to defend against the wood-cutting gangs that are known to operate in that area. Several committees have been appointed to resolve the issue, but no progress had been made by the end of 1990. The forest, however, is regenerating and the people of Ban Huay Kaw can once again gather food there. The case against the MP's wife is still in the courts. Because of the publicity that surrounded this case, many people throughout Thailand are waiting to see how it is resolved and whether the community forest will be recognized within a 1A watershed.

Outsiders can apply other more subtle pressures on village forestry. For example, in Ban Om Long, Hod District, Chiang Mai province, the district officer, for the first time, would not accept farmers' tax payments on their rotation swidden fields. This situation worries villagers, and it affects their decisions about engaging in contract farming for short-term gains instead of opting for more conservative agroforestry systems. The tax refusal is seen as an indication of growing political consensus among outsiders to ignore the tenurial rights of those living in watershed areas.

Farmers who derive their incomes from miang tea agroforestry systems in Ban Pa Pae in the *Pah Sa-nguan* north of Chiang Mai (described in Part II) are also concerned that officials have refused to accept their taxes. In 1989, about 2,000 miang producers staged a mass protest at district offices to demand tenure to their tea garden agroforestry systems.¹⁴⁵

In southern Thailand, coastal farmers do not farm in mangroves, but mangroves have always formed part of their larger agroecosystem. Outsiders, believing the mangroves belonged to no one and with short-term gains in mind, have jeopardized the long-term sustainability of livelihoods by clear-cutting mangroves for charcoal or for conversion into shrimp ponds. Villagers demanded that their protection of mangroves be recognized as a valid land use, so that land under that use cannot be alienated from them and destroyed. They are now claiming the mangroves as their community forest. In Trang province, the governor recently honored a similar request and canceled a charcoal concession in the forest reserve mangrove that was claimed as community forest.¹⁴⁶

C. Reforestation Programs in the "Economic Forest" Zone

Ironically, the greatest threat to forestry in the *Pah Sa-nguan* is the reforestation program being promoted by the RFD on land designated as "economic forests." As described in Part I, the reforestation program is designed essentially to reclaim forest reserves from occupants and to subsidize companies that monocrop eucalyptus in areas now covered by community forests or under traditional agroforestry or agrosylvicultural systems. As such, the reforestation program also poses a major threat to local forest managers.¹⁴⁷

Thailand is well situated geographically to respond to the strong demand for paper pulp from Japan, India, Taiwan, and South Korea. A Forestry Master Plan is currently being prepared to promote reforestation, primarily by responding to the desires of the commercial sector.¹⁴⁸ An earlier Asian Development Bank-financed study also focused on involving the private sector in reforestation.¹⁴⁹ Yet there are many questions about whether commercial plantations could be successful given past RTG experience with plantations and whether tree plantations would really be the best use of that land.

Villagers, NGOs, public interest groups, and think tanks are all fighting the commercial reforestation program. The Thailand Development Research Institute, a quasi-governmental organization, has raised serious questions about the appropriateness of mono-cropping eucalyptus; the generous subsidies offered to eucalyptus plantations, including the implicit guarantee that the land will not be taken away from the lessee; and the need to keep 25 percent of Thailand classified as economic forest.¹⁵⁰

Despite these questions, major reforestation projects are already planned or are underway. Shell planned to plant 200 km² of eucalyptus in Khun Song National Reserve Forest for producing woodchips for export to Taiwan and Japan.¹⁵¹ The RFD determined that 76 percent of the

area Shell wanted to lease was covered by primary tropical evergreen forest. The site had been chosen, however, because only 4,000 people were living there. Thus corporations acknowledge, at least implicitly, that the residents of the *Pah Sa-nguan* present the greatest challenge to profits from reforestation.

In other areas, villagers have already felt the impact of reforestation and have fought back.¹⁵² For example, in Ban Teppattana in Buri Ram province, a village settled by migrants 30 years ago at the encouragement of government authorities seeking to control insurgencies, villagers' agroforestry plots and croplands were planted with eucalyptus in 1984 as part of a "forest village" scheme.¹⁵³ Villagers uprooted the eucalyptus and demanded that rubber trees be planted instead, but their croplands and orchards were already lost.

In Ban Nam Kham in Roi Et province, villagers protested the destruction of their community forest to make way for eucalyptus. As one of the village leaders said, "It has always been our forest. We have our own rules to protect it, to stop other villagers from cutting the big trees down, to preserve them for our children. But one day, a wire fence was put up, and we were told the forest was no longer ours. It seemed that these outsiders could do anything they pleased with it. We couldn't allow that We have no choice but to protect our land and forest. We are poor farmers, and we need the forest to give us food. But city people never seem to understand this. They're not used to hunger and poverty."¹⁵⁴

One village protest in Ban Prakham spawned the growth of a network of villages working for the preservation of community forests that spans eight provinces in the Northeast. In the immediate Ban Prakham area, 25 villages, representing 5,000 households, have joined together to protect 4,000 ha (25,000 rai) of community forests by jointly managing it according to a mutually acceptable set of regulations. There are stiff fines for those who break the rules, rewards and confidentiality for informers, and expulsion from the community for repeat offenders.¹⁵⁵ The leader of this movement has received threats against his life, and the military maintains that the villagers must be evicted.

The Union for Civil Liberties (UCL) prepared a case study of the impacts of reforestation in 1988. It identified five major problems resulting from the program: 1) overlap between agricultural areas of people and designated plantations; 2) destruction of natural forest under the care of communities; 3) threats by influential people against villagers; 4) arrest of villagers; and 5) destruction of villagers' property.¹⁵⁶ The solutions they elicited from villagers included: 1) the cancellation of private plantations and participation by actual occupants in future decisions about plantations; 2) acknowledgment of the right of people to select the tree species to be grown; 3) in areas already planted, acknowledgement of the right of people to intercrop different species, at least after the first eucalyptus harvest; 4) the granting of documentary ownership titles to people who occupied land prior to enactment of the Forest Act of 1964; and 5) no further arrests by the government of people living in designated forest areas.

D. Population Growth and Agricultural Expansion

Population growth threatens the natural resource base, particularly where no alternative employment is available. But the linkages are not simple. In 1936, approximately 70 percent of the kingdom was still forested.¹⁵⁷ At that time, Thailand had a population of approximately 25 million.¹⁵⁸ By 1973, the population had grown to 40 million; in 1991, it was believed to be around 60 million.

Although some have claimed a causal link between population increase and forest destruction,¹⁵⁹ careful consideration of the data shows that the population increase may have contributed to deforestation, but it is not the predominant factor.¹⁶⁰ Deforestation was led by the military government's need to log in order to generate revenue for state coffers, not by peasants clearing land. Today, Thailand has undergone so much industrialization that it is on the verge of achieving NIC (newly industrialized country) status.¹⁶¹ If the transition proceeds as predicted, new urban jobs for the growing population will reduce the demand for farmland. While the impacts of increased urban consumer demands may have a negative impact on forests, there are indications that alternative employment can contribute to increased forest conservation at the village level. (See earlier section on commercial pressures to abandon conservation practices, Bau Thung example.)

On a local scale, a population increase on a limited land base has led to shortened rotation swidden cycles. In Ban Om Long, a Karen village in Hod District, fallows have dropped from 10 years to 6 years, and some village families have migrated north to villages that have more available farmland.

As the population has grown in Thailand, so has the amount of land devoted to agriculture. Some analysts have blamed agricultural expansion for deforestation.¹⁶² During the 1960s and 1970s, the Thai government actively encouraged agricultural expansion to meet export targets and generate foreign exchange. This policy followed on the heels of extensive dam and road building begun in the 1960s.¹⁶³ Farmers enlarged their fields in response to these expansion policies and high cash crop prices, often moving into logged-over forests along logging roads.¹⁶⁴ Settlers purchased the rights to some forest reserve land on the informal market,¹⁶⁵ usually from local elites who had asserted traditional "crob crong" rights by paying someone to insert twisted grass bundles into notched trees along the borders of claimed land.¹⁶⁶

Cash crop production became profitable during the 1970s, and a significant part of the deforestation was funded by commercial farmers who hired landless people to clear tracts of land for cash cropping.¹⁶⁷ Traders/moneylenders financed farmers to grow maize, kenaf, cassava, and other cash crops.¹⁶⁸ In 1960-61, the planted area was 49,443,000 rai; in 1975-76, it had expanded to nearly 14 million ha (87 million rai).¹⁶⁹ In the South, the promotion of rubber plantations has been, and continues to be, the leading cause of deforestation of Thailand's major region of rainforests.¹⁷⁰ The conversion of coastal mangrove forests into shrimp ponds was also promoted by tax incentives.¹⁷¹

Although export-driven agricultural expansion was a factor, it clearly was not the major contributor to deforestation. The total rate of increase of farmland for the country from 1975 to 1982 was only one-third the rate of deforestation during the same period.¹⁷² Additional but relatively minor contributing factors were clear-cutting to destroy the jungle hiding places of insurgents and dam-building, which flooded forests and relocated people into other forests.¹⁷³

E. Concentration of Landholdings

The impact of the concentration of land in fewer hands is effectively the same as population growth. The increasing emphasis on commoditizing Thailand's land resources inevitably promotes land speculation. This, in turn, results in increased land concentration by people with the financial resources needed to purchase property rights. Pressures for redistributing property rights have persisted in Thailand for decades; promises have been made, but a substantive land reform program is unlikely in the near future.¹⁷⁴

While landless peasants are the most dependent on forest products for food, the correlation between strong community forest management and the relative degree of landlessness is not clear. In Ban Huay Kaw (discussed above), however, it is the landless tenants who are most concerned about maintaining the forest.

F. Resettlement and Migration

In-migration and government-sponsored resettlements into land already under use also effectively increase the population density per land unit in a given locality. Thailand has a history of forced resettlement and migration by ethnic Thai and other outsiders into areas under traditional forest management. These population movements place great stress on traditional systems.¹⁷⁵ For example, the Hmong and Lisu have often migrated into forests managed by the Karen and Lua'. This situation has led to conflict over use of forest resources.¹⁷⁶ In Ban Pang Khum in Samoeng district of Chiang Mai province, Karen and Lisu conflicts had escalated to the point of killing each other's livestock. But the Upland Social Forestry Project has been successful in catalyzing mediation between the two groups, resulting in Lisu moving out of Karen watershed forests. (See Part II for further information on this project.)

Migration has been a traditional means to escape poverty, particularly in the Northeast. Northeasterners have often moved into forests in search of new farmland, and have they often opted for cash cropping. The degree to which Northeasterners opt to maintain the forest in newly established farms is not known, a researcher who studied deforestation in the "lower North" near Tak concluded that the migrants do not tend to establish community forests, but prefer to clear all forest in the immediate area of their settlement.¹⁷⁷

G. Pressures to Adopt Modern Systems Low in Biodiversity

Government extension agents and forestry programs promote modern agricultural systems that are low in biodiversity. Traditional systems, on the other hand incorporate native species, rely on natural processes, make use of environmental variation, include numerous species, are incorporated into diverse farmstead systems, and meet farmers' needs for subsistence insurance.¹⁷⁸

Efforts to promote modern plantation woodlot systems, meanwhile, have not always met with success. There are signs that this pressure may abate. The community forest movement has caused at least some foresters to recognize that natural forest management is an option for villagers and that "degraded" forest lies in the eye of the beholder -- for a villager, the lack of large timber trees does not mean a forest is "degraded."

IV. Tenurial Status of People in the *Pah Sanguan*

A. The Prevailing Perspective

An Historical Overview

During the final decade of the 19th century, King Chulalongkorn, on behalf of the RTG, proclaimed legal ownership over all land in the kingdom.¹⁷⁹ The proclamation was motivated, among other factors, by a desire to gain centralized control over the teak forests in the northern part of the country that were being claimed and commercially exploited by local princely states.¹⁸⁰

Centralized control requires a supporting bureaucratic and legal infrastructure. Accordingly, the RFD was established in 1899¹⁸¹, based on an array of laws designed to ensure that the state profited from the commercial extraction of forest resources. These laws included the Forest Protection Act and the Teak Trees Protection Act of 1897, an act prohibiting unauthorized marketing of timber in 1898, and another act in 1899 that outlawed the extraction of teak unless duties and royalties were paid.¹⁸²

Initially, the kingdom's assertion of legal control over forest resources did not impinge on the ability of Thai farmers to acquire property rights pursuant to customary norms that required de facto occupancy and cultivation. In 1901, however, King Chulalongkorn promulgated a land law that introduced the western concept of documented individual private ownership. The new law also distinguished "factual occupancy from ownership, and . . . created a system in which no protection [was] given to occupancy but only to ownership."¹⁸³

The 1901 law contributed to much confusion and injustice in areas where it was implemented. Political elites in Bangkok took advantage by procuring ownership documents. "Paradoxically, due to ignorance, the farmers who actually cultivated the land had no land documents, but the elites who used land as a means of acquiring wealth were able to acquire ownership."¹⁸⁴

The Land Code of 1954

Much of the confusion and discord resulting from the 1901 land law was mitigated by Thailand's large size, its low population density, and the customary mobility of many Thai farmers. Still many problems arose and laws were promulgated to deal with them. The most definitive legal response culminated in the Land Code of 1954, which was proclaimed by the king on November 30. The Land Code of 1954 is still the most important piece of land legislation in Thailand.

Anyone occupying a specific parcel of land on the date the code was enacted is eligible to

receive a *claim certificate*, referred to as Nor Sor 1 or S.K.1.¹⁸⁵ Upon compliance with various other provisions in the land code, the claim certificate can eventually be documentarily upgraded in three ways: a *preemptive certificate*, or Nor Sor 2, authorizes temporary occupation of the land; a *certificate of utilization*, or Nor Sor 3, establishes that the person named in the document is actually occupying and cultivating the land; a *title deed*, also known as Nor Sor 4 or *Chanode*, is the ultimate document in that it is proof of individual private ownership or fee simple absolute.¹⁸⁶

Under section 5 of the Act Promulgating the Land Code any person "who has been in possession and made use of the land" prior to November 30, 1954, had 180 days to give notice of his or her possession to a designated local official. A person failing to give notice was "deemed to have abandoned his right to possession of the land," and the RTG was empowered to reallocate it. As with earlier land laws, many farmers were unaware of laws promulgated in Bangkok and they failed to give timely notice. Those who subsequently learned that they were deemed to have abandoned their rights were predictably irate. Their discontent contributed to social and political unrest and in November 1971, Thai military leaders seized power and imposed martial law.

Three months later, the military government revoked the provision on abandonment.¹⁸⁷ At the same time, however, it left intact laws that concerned the classification of forest land and the use of forest products.¹⁸⁸ The most ominous provision concerned farmers whose land was included within forest reserve boundaries.

The National Reserved Forest Act of 1964

The Forest Act of 1941 defined forest as "land which has not been acquired by any person under the land law."¹⁸⁹ The definition exacerbated ambiguities in the Land Code and may have encouraged prospective migrants to occupy (i.e., "acquire") forest land. In an effort to partially curtail migration, the National Reserved Forest Act was promulgated in 1964. It provides the legal basis for setting aside forest reserves. It also provides that "within the national reserved forest, no person shall hold or possess the land, develop, clear, burn the forest, cut timber, collect forest produce or cause any damage" without authorization from the RFD Director-General. People found in violation of the act could be imprisoned for up to five years and fined up to 50,000 baht (approximately US\$2,000).¹⁹⁰ Additional restrictions were placed on people residing within areas designated as national parks or wildlife sanctuaries.¹⁹¹

As of 1985, forest reserves covered 42 percent of the total land area of the country. An additional four percent was targeted for reservation status. The legal status of the 10 - 15 million people living within forest reserves, including substantial number of long-term occupants, was worse than non-existent: they were in legal violation by their very presence. The Chief Justice of the Supreme Court of Thailand, Sophon Ratanakhon, acknowledged this fact in 1976. Justice Ratanakhon observed that a forest dweller

"starts his business by committing a crime as soon as he moves onto the land. When he begins to clear the ground by cutting and

burning trees, he breaks another law and he remains liable for punishment as long as he stays on the land. After a few years, if the land is exhausted and he moves to a new site, he commits a new series of crimes. As far as the government is concerned, he will never have any right whatsoever in the land."¹⁹²

The Game Preservation and Protection Act and the National Park Act

The RTG has taken other legal steps to both curtail migration into and to depopulate forested areas. Foremost in this regard are the Game Preservation and Protection Act of 1960 and the National Park Act of 1961. These laws became even more important after 1985, when a new National Forestry Policy mandated that at least 15 percent of the kingdom's land area be designated as conservation/protection forests. This target is to be met, in large measure, by establishing national parks and wildlife sanctuaries. As of 1988, 31 wildlife sanctuaries encompassed 2.4 million ha and 59 national parks covered 3,041,599 ha. Twenty-two additional parks, encompassing 1,136,543.5 ha, were still pending approval.¹⁹³

As with forest reserves, the RFD has legal jurisdiction over wildlife sanctuaries and national parks. The Game Preservation and Protection Act and the National Park Act are even more restrictive of tenurial rights and claims than the National Reserved Forest Act. Both laws prohibit unauthorized extraction of forest resources and human occupation.¹⁹⁴ Neither contains any provision whereby people living in wildlife sanctuaries or national parks can legalize their occupation, regardless of how long they have resided in the area. People living in areas designated as commercial forests, by contrast, are at least theoretically eligible to obtain some degree of official land tenure security.

B. Government Responses

By the mid-1970s, the tenurial predicament of people living in the steadily expanding forest reserves, national parks, and wildlife sanctuaries had generated considerable local unrest and was becoming politically untenable. During 1974, an amnesty for occupants of forest reserves was declared by Prime Minister Kukrit Pramoj.¹⁹⁵ The following year, the RTG cabinet approved a plan for a forest village program to be managed by the RFD. The plan was too ambitious, however, and the RFD was soon ordered "to solve the problem by giving the people the minimum development needed for their well being [and] to reduce expenses."¹⁹⁶

The RFD responded by instituting the National Forest Land Allotment Project, or STK project. It allows occupants of areas designated as commercial/production forests to lease up to 2.4 ha of land, but offers no tenurial provisions for community forests. People living in conservation/protection forests eligible to participate in the STK project, the RFD's Forest Village Program, the Forest Industry Organization's Plantation Program, or the Agrarian Land Reform Office's titling project.¹⁹⁷

Meanwhile, debate in Thailand continues to be heated over the term "community forestry." Should it be applied to forestry that is not a village initiated response to villagers' needs and opportunities, as opposed to forestry promoted from outside to meet what outsiders think villagers need and to meet targets set by outside organizations? Government-sponsored programs during the 1980s were defined without any knowledge of existing systems. Instead, they focused on creating new woodlots on village "public lands" (usually the limited public grazing lands, although these are often shared by several villages),¹⁹⁸ the taungya "forest village" system, or on modern agroforestry initiatives.

The primary goal of these programs is to increase the number of planted trees. In the taungya system, "forest villages" are created in two ways. Either villagers are paid to plant trees, or they plant them in exchange for rights to cultivate the spaces between saplings for a few years (taungya and its variants), but the trees belong to the government. In the "community forestry" or "village woodlot" program (two names for the same program), the RFD provided the seedlings from a short list of available species to plant on public land (grazing land or temple ground, of limited size). The villagers may then harvest the trees. Thai agroforestry initiatives have focused on promoting textbook examples of regular agroforestry combinations.¹⁹⁹

There are indications, however, that the government is becoming more interested in how it can promote existing village-initiated forestry.²⁰⁰ The proposed community forest law is one example. Another is revocation of the RFD requirement that the 20,000 seedlings (the number villages must accept) be planted in a plantation block. Villagers may now plant them wherever they want -- along irrigation canals, by roads, in their door yards, etc.²⁰¹ Some villages want to plant trees on land in the *Pah Sa-nguan*, a practice the RFD local offices have accepted informally, since they are barred from doing so officially.

The bottom line is that Thai foresters have begun to recognize two kinds of community forestry -- those envisioned by outsiders (e.g., woodlots, taungya plantations) and the indigenous forestry systems in place in the *Pah Sa-nguan*. Now they are trying to figure out ways to incorporate indigenous systems into the RFD-structured program. In Chiang Mai regional office, for example, the RFD has begun a pilot program to recognize community forests that are not located within protected areas (including watersheds, national parks, etc). They accept the idea that "community forests" proposed within this program can be natural forest groves or plantations. To date, however, only a few communities have expressed an interest in the program.²⁰²

C. An Alternative Perspective

Rights of Possession

Effective promotion of community forestry will entail motivating forest communities to conserve the local resource base and make long term improvements. Although amendments to existing Thai national laws might prove helpful, some policy reforms can be made pursuant to existing domestic and international laws.

According to the prevailing, and basically unchallenged, interpretation of Thai national laws, for example, rights of possession recognized in the Land Code are automatically and unilaterally extinguished whenever an occupied area is incorporated into an officially designated forest reserve, wildlife sanctuary or national park or, (more recently) within a watershed designated as 1A. This usurpation can occur regardless of its occupation status as of 1954.

But the prevailing interpretation is not consistent with any literal or strict reading of the Constitution of the Kingdom of Thailand and other relevant laws. Section 32 of the Constitution guarantees that "every person shall enjoy the liberty of dwelling. The peaceful habitation of every person in and for his dwelling is protected."²⁰³

Section 33 is even more relevant, in that it protects "the right of a person in property" (*sit ti khong book-kon nai subsin*). The provision's significance is that, contrary to many unofficial translations, the right is not limited to individual private property rights. Instead, it speaks in general terms of the rights of persons in property.

The Civil and Commercial Code of Thailand (1925) explicitly identifies a distinct type of property right that it refers to as a possessory right. Section 1367 of that code provides that "a person may acquire a possessory right by holding property with the intention of holding it for himself." The prevailing view among Thai lawyers is that this provision does not apply to the kingdom. Section 1307 is cited in support of this contention. It states that "no prescription can be set up against the State with regard to any property which forms part of its public domain."

To claim that Section 1307 renders Section 1367 meaningless insofar as the Thai state is concerned, however, is to miss the point. The Thai constitution protects the property rights of persons. Possessory rights are property rights. Many possessory rights existed prior to the enactment of the 1978 constitution, as well as the new constitution likely to be ratified in 1992. Indeed, many property rights existed prior to the enactment of the Civil Code and, for that matter, prior to King Chulalongkorn's proclamation in the 1890s. Many also existed prior to their inclusion in areas designated as forest reserves, national parks and wildlife sanctuaries. Further, even the prevailing view acknowledges the legal efficacy of possessory rights, at least insofar as nongovernmental third parties are concerned.

It would appear, therefore, that any arbitrary and unilateral RTG extinguishment of long-standing possessory rights in the areas designated as conservation/protection forests violates Thai constitutional standards, and will most likely also violate the new constitution. Existing procedures for designating areas as national parks and wildlife sanctuaries completely ignore the existence and legal efficacy of undocumented possessory rights. As such, these procedures suffer serious constitutional infirmities and, at least according to Chapter I of the 1978 Thai Constitution, are legally unenforceable as written, at least insofar as some long-term occupants are concerned.

This alternative perspective is reinforced by various provisions in Chapter III of the 1978 constitution that concern the rights and liberties of the Thai people²⁰⁴, as well as by the

Expropriation of Immoveable Property Act of 1987.²⁰⁵ It should be emphasized, however, that the Kingdom of Thailand denies non-Thai ethnic minorities in Thailand any legal protection and privileges, including recognition of customary property rights. As a result non-Thai ethnic minorities must first prove that they are citizens of Thailand before they can benefit under Thai national law.

Indigenous and Tribal Rights in International Law

The Historical Basis

Long-term occupants of the *Pah Sa-nguan*, including non-Thai ethnic minorities, also enjoy rights under international law. Ironically, although Thailand was never colonized, the legal and political marginalization of the poor rural majority, especially the nonrecognition of their indigenous territorial rights, is mirrored in the colonial experience of Thailand's neighbors.²⁰⁶ In Anglo-American legal terminology, the crux of the problem centers around the concept of aboriginal title.

During the early period of European colonization, indigenous territorial rights were recognized, at least theoretically.²⁰⁷ The rights of ownership or dominion were rarely distinguished from sovereign or imperial rights.²⁰⁸ Since the days of the Roman Empire, both types of rights were understood to emanate from natural law.²⁰⁹

The first to argue that these rights applied to non-Christians was the Dominican theologian and renowned humanist, Francisco de Vitoria (1483/6-1546). An incorrigible anti-imperialist, Vitoria's positions were largely inspired by the 13th Century scholar, Thomas Aquinas. Aquinas believed that temporal rule emanates from nature and that the dictates of nature are universal. In Aquinas's opinion, non-Christian leaders were legitimate -- provided that they did not violate natural law, they must be obeyed by their subjects, including Christians.²¹⁰

Building on Aquinas's premise, in 1539, Vitoria delivered an important lecture at the University of Salamanca. "De Indis Prior et de Indis Posterior," in which Vitoria examined various legal issues pertaining to the Spanish conquests in the Americas. He concluded that rights enjoyed by virtue of natural law must be recognized by a Christian sovereign aspiring to spread the faith. He also argued strenuously that there was no legal basis for unilaterally usurping the sovereignty and property rights of non-Christian natives.²¹¹ According to Vitoria:

The natives undoubtably had true dominion in both public and private matters, just like the Christians, and neither their princes nor private persons could be despoiled of their property on the ground of not being true owners.²¹²

Vitoria's theory held sway for more than three centuries as most colonial powers acknowledged that indigenous sovereignty and property rights could be acquired only through conquest or

voluntary cession. By the 19th Century, however, the theory gave way to an ominous new legal doctrine that held that land inhabited by people not "permanently united for political action" was deemed to be *territorium nullius* (i.e., empty territory).²¹³ This inequitable and shortsighted perspective was originally meant to be legally binding only vis-a-vis colonial powers.²¹⁴ Nevertheless, it was domestically internalized prior to independence by native political elites throughout south and southeast Asia. It then provided a legal basis for ignoring undocumented indigenous territorial rights and pretending that indigenous territories were unoccupied.

The Contemporary Basis

The doctrine of *territorium nullius* was emphatically rejected by the International Court of Justice (ICJ) in a 1975 decision known as the *Western Sahara Case*, which recognized the existence and legitimacy of indigenous rights in the former Spanish colony of Western Sahara. The ICJ concluded that at the time of colonization in the mid-1880s, the region was inhabited by peoples who, if nomadic, were socially and politically organized in tribes and under chiefs competent to represent them.²¹⁵

The *Western Sahara Case* represents a fundamental change in international law. It recognized the existence of a valid governmental structure based on indigenous, as distinct from westernized, institutions and processes. The implication of the decision is that, historically, many other competent indigenous governments were illegally ignored and destroyed. More important, the decision lays a modern legal foundation for recognizing the legal efficacy of rights and institutions that do not draw their legitimacy from modern nation states.²¹⁶

The rationale behind the *Western Sahara Case* has been gaining ground among those advocating for recognition of the human rights of indigenous peoples in Thailand and elsewhere. In the words of one prominent international lawyer:

[T]he jurisprudential starting-point of the rights of peoples is a direct assault upon positivist and neo-positivist views of international law as dependent upon State practice and acknowledgement. In this regard, the rights of peoples can be associated with pre-positivist conceptions of law which at the very birth of international law were invoked by Vitoria and others on behalf of Indians being cruelly victimized.²¹⁷

Support for this perspective can also be drawn, albeit indirectly, from the United Nations Covenant on Civil and Political Rights which the Kingdom of Thailand has ratified. Article 2.1 obligates signatories to ensure that rights enumerated in the covenant are upheld without regard to color, language, social origin, property, or other status. State signatories are also obligated in Article 2.3(a) to provide effective remedies for any violation of these rights.²¹⁸

Article 27 may have the most potential for promoting community-based forest management. It

mandates that ethnic, religious, and linguistic "minorities . . . shall not be denied the right, in community with the other members of their group, to enjoy their own culture." Although rights to land and other natural resources are not mentioned specifically, this language is nevertheless an explicit recognition by that 1) smaller communities exist within larger nation states and 2) each country has an affirmative duty to protect the rights of these communities as well as those of the individuals who compose them.

Another important international instrument that codifies the human rights of many people living in or dependent on the *Pah Sa-nguan* is the International Labor Organization's (ILO) 1989 Convention No. 169 Concerning Indigenous and Tribal Peoples. Thailand has not yet ratified the convention. As an ILO member, however, Thailand is legally obligated under Article 19 of the organization's founding charter to implement the convention.

Articles 14 and 15 of the convention are key. Article 14 provides:

1. The rights of ownership and possession of the peoples concerned over the lands which they traditionally occupy shall be recognized. In addition, measures shall be taken in appropriate cases to safeguard the right of the peoples concerned to use lands not exclusively occupied by them, but to which they have traditionally had access for their subsistence and traditional activities. Particular attention shall be paid to the situation of nomadic peoples and shifting cultivators in this respect.
2. Governments shall take steps as necessary to identify the lands which the peoples concerned occupy, and to guarantee effective protection of the rights of ownership and possession.
3. Adequate procedures shall be established within the national legal system to resolve land claims by the peoples concerned.

Article 15 adds:

The rights of the peoples concerned to the natural resources pertaining to their lands shall be specially safeguarded. These rights include the rights of these peoples to participate in the use, management and conservation of these resources.

These international standards, along with those previously mentioned, make clear that some people in the *Pah Sa-nguan* possess legal rights to forests and other natural resources. The

rights are not solely contingent on Thai national laws. Under international law, and to a lesser extent under its own domestic legislation, the Kingdom of Thailand has a variety of affirmative obligations to ensure the protection of undocumented legal rights held by people in the *Pah Sanguan*.

V. Recommendations/Options

A. The Emerging Consensus

Various seminars and workshops have focused on the recognition or grant of tenurial rights in the *Pah Sa-nguan*. Many NGOs and major universities have encouraged and nurtured an ongoing dialogue that includes government and forest community representatives. In December 1990, the Thai Volunteer Service hosted a seminar on "Policy and Management of Forest Land." During the autumn of 1990, several NGOs participated in the deliberations of a governmental subcommittee that is part of the Committee on National Forestry Policy. The committee is tasked to recommend amendments to the 1985 National Forestry Policy. In 1989, the NGO Coordinating Committee on Rural Development, an umbrella organization representing 205 NGOs, published its set of suggested solutions which focused on government recognition and support of community forests.²¹⁹ The Chulalongkorn University Social Research Institute (CUSRI) organized a major seminar on "People and Forestry" in 1988.²²⁰

The Local Development Institute, in cooperation with the Social Research Institute of Chiang Mai University and the Faculty of Humanities and Social Sciences at Khon Kaen University, recently formed the "Community Forestry in Thailand: Development Perspectives" research group. Among other areas of interest, the research group inquired "into the legal basis for legitimate claims of historical and traditional rights and obligations concerning the use and management of local forests."²²¹

In July of 1992, the research group held a workshop to discuss the findings of their research. The workshop culminated with the issuance of a Declaration of Customary Rights of Local Peoples. The Declaration called for recognition and guarantees by the Thai government of the customary rights of local communities. It also acknowledged that both the government and local communities "have a duty to protect/conservate and develop/utilize [natural resources] on a sustainable basis."²²²

The Declaration is yet another example that Thai NGOs and universities are striving to be constructive. Nevertheless, the ongoing dialogue is fraught with tensions and disagreement. For example, NGOs have refused to participate in the Forestry Master Plan exercise in Thailand claiming that the terms of reference for the plan basically overlooked the rights, claims, and potentials of people living in or directly dependent on the *Pah Sa-nguan*.²²³ The recent spate of forced evictions and resettlement of forest-dependent peoples fostered further suspicions and ill-will.

Despite the divergent perspectives, there appears to be an emerging consensus on the need to establish and implement some type of innovative and meaningful community forestry program. During December 1992, the Thai Forestry Sector Master Plan Project Management Team began circulating a draft paper for discussion. Among other things the paper, "Thai Forestry Sector Policy: Foundation for Sustainable Development," calls for emphasis to be placed on forest-based rural development, including community forestry and the involvement of NGOs as

catalysts for, and participants, in rural development." The paper, however, is notably vague on operational details for establishing and implementing a community forestry program.

The official first step, which will likely be provided for in a limited way in the proposed Community Forest Act, will be to classify and designate some occupied areas of the *Pah Sa-nguan* as community forests. Without any concurrent definition of the rights and duties of local people living in areas designated as community forests, however, the designation, by itself, will likely be insufficient, especially for people living within areas that are still forested.

There is a pressing need, therefore, to secure and specify the tenurial rights and duties of forest communities in all parts of the *Pah Sa-nguan*, as well as those of the RFD and to provide technical assistance for promoting more sustainable uses of forest resources. This section addresses fundamental legal issues concerning this need and provides model legal instruments that are meant to help accomplish these essential tasks. The instruments reflect many of the recommendations that being made or under consideration. They build on the ethnographic and legal analyses contained in previous sections. To the extent possible, efforts were also made to harmonize the instruments with existing Thai national laws, as well as provisions in the official draft of the proposed Community Forest Act.

The major recommendation is for legitimizing and securing community-based tenurial rights among occupants of the *Pah Sa-nguan* who have established and protected community forests, including those held by people who live in areas designated as conservation/protection forests. This goal can be accomplished by the RFD or another appropriate institution in one of several ways.

The first, which would be particularly welcomed by many forest communities would entail the recognition, delineation, and protection of community ownership rights and the issuance of community titles. It would probably require new national laws.

The second strategy, which can be legally implemented under existing law, as well as under the proposed Community Forest Act, would be to grant long term community forest leases (CFLs) to qualified forest communities. The Community Forest Act, however, should be made applicable to communities located within areas designated as conservation/protection forests. A more limited, forestry protection leases (FPL) could likewise be entered into with user groups and informal organizations within forest communities.

B. Community Considerations

Community-based Tenurial Strategies

As the existing social forestry, agrarian reform, and land titling programs demonstrate, efforts to survey and document individual land rights are welcomed by many small farmers. But they are expensive, slow, and cumbersome. In areas where customary rights overlap, these

individualized programs often generate discord and inequity. Furthermore, there is no urgent need to segregate and document individual rights within natural forests since the immediate threats to existing individual customary rights emanate primarily from outside the community, not from within. Individual documented delineation, therefore, is not a pressing need -- at least in the short term.

What is pressing is the need to provide forest managers with legal and economic incentives to protect what remains of natural forests and to develop an effective partnership between forest managers and the RTG, especially the RFD, in conserving, protecting, and sustainably developing natural forest resources. To meet this need, discouraging migration and stabilizing populations in natural forests are necessary. This can best be accomplished best through the recognition or grant of community-based tenurial rights, particularly on behalf of long-established communities that have the desire and capacity to sustainably manage forest resources.

The recognition or grant of community-based rights will put outsiders interested in migrating on to forest land or extracting forest products on notice that natural resources within the community's perimeter are not available. Legalizing customary community-based tenurial rights will also promote an alliance between the RFD and local forest managers in the struggle to protect some of what remains of Thailand's natural forests. Indeed, because they already live in the forests, holders of community-based tenurial rights are already uniquely positioned to help protect the forests. Community-based tenurial strategies will also enable the RFD and other governmental institutions concerned with land tenure to redirect forest migrants to other areas that are suitable for intensive, but sustainable land use.²²⁴

Community Titles

For most indigenes and other original long-term occupants of the *Pah Sa-nguan*, the appropriate governmental response would be the official recognition, delineation, and protection of indigenous territorial rights. Gross inadequacies in demographic and land use data preclude any credible estimates of how large an area would be covered, but it is likely that large areas of the *Pah Sa-nguan* would remain unaffected. It is certain that the RFD could still play an important role in helping these communities promote sustainable management.

Community-based management systems, especially their common-property components, are frequently misunderstood,²²⁵ and are all too often suppressed by national governments.²²⁶ They are not open-access systems. Nor are they systems in which all members of a forest community necessarily possess equal rights to all resources within the community's territorial perimeter. The distinguishing characteristic of a community-based management system is that when its participants legally allocate and enforce the rights to natural resources, they rely on themselves and not on the national government. In other words, a community-based management system draws its primary legitimacy from within the community and not from the nation-state in which it is located.

Various types of rights can exist within a community-based management system. Some rights

may concern the inherited property of a kinship group or encompass the territory over which a larger social unit asserts customary control. Community-based tenurial rights within a community-based management system may be held by an individual, a nuclear or extended family, a household, a neighborhood, or the community as a whole. Whatever their source and regardless of who holds them, rights within a community-based management systems often overlap in time and space.²²⁷

Although seldom recognized and rarely referred to, community-based management systems are widespread throughout the forest reserves of Thailand. Indeed, informal land tenure systems can be found throughout rural Thai society.²²⁸ Most, if not all, provide for the allocation of individual, kinship, and community rights.

International law provides for the recognition and protection of community-based management systems located within indigenous territorial perimeters.²²⁹ A domestic mandate can also be found, albeit to a more limited extent than in some of Thailand's neighbors (e.g., the Philippines and Indonesia²³⁰), in existing national laws that are not yet effectively invoked.

Legal recognition would effectively repeal existing national laws and policies that promote "open access" situations in the kingdom's "public" forest zones. It would discourage over-exploitation and migration. It would also put existing and prospective concessionaires on notice that legal rights to extract natural resources within ancestral domains are subject to community approval and profit-sharing arrangements.

Perhaps most important, recognition would promote an alliance between national governments and forest-dependent communities that have long resisted migration and external extraction activities within their indigenous territorial perimeters. It would also provide an official imprimatur with these ongoing local- level protection and conservation efforts.

A major reason for opposing recognition of indigenous rights in Thailand and elsewhere is the mistaken belief that it will effectively eliminate the role of foresters in managing forest resources within indigenous territorial perimeters. It is necessary to emphasize, therefore, that *recognition* of indigenous territorial perimeters and the legitimation of the common property management systems operating within these perimeters *will not eliminate the role of foresters or the RFD*. Instead, recognition will alleviate, at least in the short term, some of the pressures on remaining forest resources while helping to ensure that long-term forest dwellers play an official role in, and are more likely to profit from, official forest development activities.

Recognition of indigenous territorial rights, therefore, should have little, if any, impact on existing or prospective forestry extension services. For decades, agricultural extension agents have assisted rural farmers in promoting productivity and sustainable resource management without controlling the tenurial rights of their target constituencies. Nor should forestry extension agents working within indigenous territories have the power to control, let alone annul, the tenurial rights of local residents. If and when it is deemed necessary to regulate or curtail certain forest-farming practices, zoning laws and regulations can be enacted.

Community Forest Leases

If community-based rights are not likely to be officially recognized in Thailand in the near future, CFLs may be a desirable alternative, especially for forest communities threatened with displacement. The legal basis for granting long-term, community-based leases already exists in Section 16 of the National Reserved Forest Act which empowers the RFD Director-General, subject to approval by the Minister of Agriculture and Cooperatives, to enter into agreements with forest managers and grant them legal rights to exploit and reside on classified forest land. To date, section 16 has been used only under the STK project to legalize individual occupation and exploitation of up to 15 rai of classified and forest land deemed suitable for agriculture.

Additional legal support can be found in the Game Preservation and Protection Act. Section 5 limits application of the act if necessary "to protect oneself or others from danger or to preserve or protect the property of oneself or others." Legally defined as "property," possessory rights would appear to be covered by this exception. Section 23 empowers "competent" government officials to authorize entry into game reserves. Section 22 likewise empowers the RFD Director-General to authorize hunting and gathering activities for the purpose of "education or technical research," two categories that could be liberally interpreted.

The National Park Act is more restrictive. Nevertheless, Section 6 states that "land which may be designated as a national park must be land which is not lawfully owned or possessed by any person", a provision that bolsters the view (outlined in Section IV) that some national parks have been illegally established. These legal infirmities could be remedied by issuing CFLs or FPLs to qualified occupants.

Although community forest leases may be granted under existing Thai national laws, they will likely be explicitly authorized in the pending Community Forest Law only for people living within areas designated as commercial/production forests. At the very least, eligibility should likewise be extended to communities within areas designated as conservation/protection forests. Prospective community forest lessees should desire to gain greater control over their local forest resources and should have a demonstrable capacity to protect and manage these resources sustainably. In many locales, the support of local governments will also be an important factor.

The community lease concept being proposed in this paper is, thus, more expansive in scope than the existing STK and village forest programs or the leasing scheme envisioned in the draft Community Forest Law. As with recognition of indigenous territorial rights, however, a CFL would *not* override or negate individual land rights. Rather, it would legalize -- at least in the short term -- existing, informal CPRs. The community forest lease being recommended would rely on these informal systems. In other words, within the lease perimeters, members of the community would rely on themselves -- as they already do -- when legally allocating and enforcing rights to land and other natural resources. (Whenever appropriate, however, the RFD could help with enforcement vis-a-vis community outsiders.) This situation should prevail within a leased area until a majority of people in the community express a clear preference for individual ownership or leasehold rights that are based on national, as distinct from local

customary, laws.

Community Forest Leases: A Model Agreement

A community forest lease can be simple and straightforward. The agreement is a contract between the RTG and the community in which the rights and duties of both are negotiated and agreed upon. In essence, it should include a promise by the community to protect and develop local forest resources sustainably in return for a promise by the state to grant and protect the community's rights to the resources. Each agreement, however, should reflect local variables. For example, special provisions could be made for conversion of arable land or, when appropriate, some commercial extraction activities could be authorized. A model agreement follows.

COMMUNITY FOREST LEASE

This agreement, dated _____, B.E., is made and entered into between the Royal Thai Government, represented by the Director-General of the Royal Forestry Department, hereinafter referred to as the GRANTOR, and the community of _____, hereinafter referred to as the GRANTEE, whose members have signed the agreement and are identified in the attached census which forms an integral part of this agreement, and have formed themselves into the _____.

WHEREAS, the GRANTOR has legal authority under Section 16 of the National Reserved Forest Act to enter into agreements with forest managers which grant them legal rights to exploit and reside on classified forest land;

WHEREAS, the GRANTEE is qualified to enter into a lease agreement with the Royal Forestry Department and has applied to do so; and

WHEREAS, the GRANTOR has evaluated and favorably considered the application of the GRANTEE:

NOW, THEREFORE, in consideration of the foregoing premises and the following terms and conditions, the GRANTOR and the GRANTEE of their own free will enter into this COMMUNITY FOREST LEASE, which covers an area located in _____, District of _____, Province of _____, containing an area of _____ rai and technically described in the attached map, which forms an integral part of this agreement.

Terms and Conditions

GRANTEE

1. The GRANTEE shall have the sole and exclusive right to possess peacefully, occupy, manage, and protect the land and natural resources located within the area described above against any and all third parties, including the right to allocate the land in accordance with its established traditions and the right to farm arable plots, provided that no conveyance of any property rights within the leased perimeter shall be made during the existence of this Agreement to anyone who is not a member of the community.
2. The GRANTEE shall preserve monuments and other landmarks within the confines of the land that designate corners and boundaries.
3. The GRANTEE shall protect and conserve the forest trees and forest products naturally grown on the land, plant new trees when appropriate, and cooperate with the Royal Forestry Department in efforts to protect forest areas immediately adjacent to the leased area.

4. The GRANTEE shall not cut, gather, or harvest for commercial use naturally grown forest products from the area or any adjacent area except in accordance with a license or permit issued by the GRANTOR upon prior application of the GRANTEE.

5. The GRANTEE shall be able to cut, gather, or harvest for commercial use trees or other forest products that are planted or otherwise grown by its members.

6. The GRANTEE, by entering into this Agreement shall not be deemed to have waived any claim of pre-existing or prospective private ownership rights inside or outside the area covered by this Agreement.

GRANTOR

1. The GRANTOR shall extend technical assistance, extension services, and other support to the GRANTEE.

2. The GRANTOR shall maintain the present legal status of the area and shall not reclassify or grant to any and all third parties any rights or privileges to develop, utilize, or manage the area during the existence of this Agreement.

3. The GRANTOR shall, upon the request of the GRANTEE, assist efforts to protect the area from encroachment and any unauthorized extraction of natural resources.

4. The GRANTOR shall not terminate or cancel this Agreement unless the GRANTEE fails to comply with the terms and conditions of the Agreement within one year after being notified in writing of the alleged violations.

The provisions in this Agreement have been explained by the GRANTOR in a language understandable to the GRANTEE prior to the signing of the Agreement.

This Agreement becomes effective upon its signing by the authorized parties and shall continue for a period of ____ years, renewable for another ____ years at the option of the GRANTEE.

IN WITNESS WHEREOF, the parties have signed their names below this _____ day of _____, B.E. _____.

_____ President or Chairperson Corporation/Cooperative	_____ Director-General Royal Forestry Department
--	--

Community Representative

Signed in the Presence of:

Approved:

Minister of Agriculture and Cooperatives

C. Procedural Considerations

Legal Personalities

An important issue concerns the legal personality and/or land-holding entity of a community that would hold a CFL or an FPL. Thai national law recognizes as legal entities only individuals, cooperatives, corporations, or state entities. At present there are no provisions for legally recognizing informal group entities.

In the Philippines, communities applying to enter into a Community Forest Stewardship Agreement are required to incorporate into a non-stock, nonprofit corporation registered with the Securities and Exchange Commission. Procedures could be developed for doing the same in Thailand. Another alternative might be to organize into a cooperative formed under the auspices of the Department of Cooperative Promotion.

Requiring the community to establish its legal personality by registering with a government agency located far away, however, has serious drawbacks, especially if the legal personality can be dissolved when the community fails to comply with procedural requirements such as an annual filing of financial statements or minutes of meetings. It would be preferable, therefore, to adopt a more informal approach. In West Bengal, India, forest protection committees register with the local District Forest Officer prior to entering into Joint Management Agreements.²³¹ This approach provides an attractive alternative to incorporation, provided that the committees' registration cannot be arbitrarily revoked by forestry officials.

Another alternative would be simply to require a complete census of all members of the community prior to issuance of the lease or that all adult members of the community (or heads of households) sign the lease. The completed census or the signatures would legally define the community, the census being deemed to be an integral part of the agreement. This alternative could also be pursued in conjunction with incorporation or registration requirements. It would ensure that in the event of corporate dissolution or the revocation of registration, the lease would not likewise automatically dissolve since there would still be two parties to the agreement.²³²

Identification of Prospective Lessees

The first step in the process of issuing CFLs will require the RFD to identify those communities that have the capacity and desire needed to protect and manage forest resources sustainably, and that also aspire to have their tenurial claims legally formalized. This step, and all ensuing steps, should be taken in close collaboration with interested forest communities and local NGOs. In many, if not most, instances these communities existed prior to the enactment of the Land Code in 1954. Many of these communities -- but by no means all -- have also been interacting with Thai NGOs and, therefore, are already identified.

Forest communities should be allowed to define themselves. This provision will help ensure that each community possesses the necessary cohesion to comply with its commitments under the

CFL. There should be no prescribed limits on the size or overall makeup of the community.

Perimeter Delineation

There should also be no prescribed limits on the amount of land that can be leased. In determining the extent of the territorial boundaries of the area to be leased, the RFD should, whenever possible, rely on customary laws and traditions of the community.

Formal delineation of the territorial boundaries *must ultimately rely on field-based consultations with community members*. Evidence to be considered in determining the boundaries might include, but should not be limited to, the following:

- burial grounds,
- domesticated trees,
- testimony of community members, especially older members,
- rice terraces and other signs of permanent improvements,
- sacred grounds and places of worship,
- anthropological and sociological studies,
- tax receipts, and
- other official knowledge of occupation, such as applications under the Land Code for, or possession of, claim certificates (i.e., Sor Kor 1 documents, tax assessments, mortgages, school records, court records, etc.).

Delineated areas should be contiguous. Whenever possible, they should also encompass all the resources necessary to the well-being of the community. This feature is especially important in regards to watersheds. Where demographic and environmental pressures are not yet severe, it is also recommended that areas in addition to those customarily claimed should be included within the territorial perimeter. They would allow for natural population growth and would help protect against migrant encroachment and illegal extraction activities over a larger area.

D. Forest Protection Leases

Some forest-based communities lack the internal cohesion and capacity required to manage, develop sustainably, and allocate and enforce informal customary rights over the entire local resource base. As such, they may not be well suited to entering into CFLs or having their indigenous territorial rights recognized on a community basis.

Many of these same communities, however, include user groups or informal organizations that are capable of and willing to protect a designated area of natural forest. Indeed, there are several reported instances of user groups and informal organizations that are already protecting remaining areas of natural forest. A less comprehensive forest lease would legalize these efforts.

A forest protection lease empowering user groups and informal associations can also be simple

and straightforward. A model agreement follows.

FOREST PROTECTION LEASE

This agreement, dated _____, B.E., is made and entered into between the Royal Thai Government, represented by the Director-General of the Royal Forestry Department, hereinafter referred to as the GRANTOR, and the _____, whose members have signed this Agreement, are identified in the attached census, which forms an integral part of this Agreement, and have formed themselves into the _____, hereinafter referred to as the GRANTEE.

WHEREAS, the GRANTOR has legal authority under Section 16 of the National Reserved Forest Act to enter into agreements with forest managers which grants them legal rights to exploit and reside on classified forest land;

WHEREAS, the GRANTEE is qualified to enter into a lease agreement with the Royal Forestry Department and has applied to do so; and

WHEREAS, the GRANTOR has evaluated and favorably considered the application of the GRANTEE:

NOW, THEREFORE, in consideration of the foregoing premises and the following terms and conditions, the GRANTOR and the GRANTEE of their own free volition enter into this FOREST LEASE, which covers an area located in _____, District of _____, Province of _____, containing an area of _____ rai and technically described in the attached map that forms an integral part of this agreement

Terms and Conditions

GRANTEE

1. The GRANTEE shall have the sole and exclusive right peacefully to utilize, manage, and protect the land and natural resources located within the area described above against any and all third parties.
2. The GRANTEE shall preserve monuments and other landmarks within the confines of the land that designate corners and boundaries.
3. The GRANTEE shall protect and conserve the forest trees and forest products naturally grown on the land and shall cooperate with the Royal Forestry Department in efforts to protect forest areas immediately adjacent to the leased area.
4. The GRANTEE shall not cut, gather, or harvest for commercial use naturally grown forest products from the area or any adjacent area except in accordance with a license or permit issued

by the GRANTOR upon prior application of the GRANTEE.

GRANTOR

1. The GRANTOR shall extend technical assistance, extension services, and other support to the GRANTEE.

2. The GRANTOR shall maintain the present legal status of the area and shall not reclassify or grant to any and all third parties any rights or privileges to develop, utilize, or manage the area during the existence of this agreement.

3. The GRANTOR shall, upon the request of the GRANTEE, assist efforts to protect the area from encroachment and any unauthorized extraction of natural resources.

4. The GRANTOR shall not terminate or cancel this Agreement unless the GRANTEE fails to comply with the terms and conditions of the Agreement within one year after being notified in writing of the alleged violations.

The provisions in this Agreement have been explained by the GRANTOR in a language understandable to the GRANTEE prior to the signing of the Agreement.

This Agreement becomes effective upon its signing by the authorized parties and shall continue for a period of ____ years, renewable for another ____ years at the option of the GRANTEE.

IN WITNESS WHEREOF, the parties have signed their names below this _____ day of _____, B.E. _____.

President or Chairperson
Corporation/Cooperative

Director-General
Royal Forestry Department

Representative of the User
Group or Informal Organization

Signed in the Presence of:

Approved:

Minister of Agriculture and Cooperatives

E. Cooperative Enforcement Policies

The RFD clearly lacks the capacity to enforce all forest laws and regulations in all parts of the *Pah Sa-nguan*. A fact readily acknowledged in private conversations with senior RFD officials. It is recommended, therefore, that the RFD immediately institute a policy whereby people in the *Pah Sa-nguan*, regardless of whether they hold recognized and/or documented tenurial rights, are authorized to help enforce existing forestry laws.

This paper is replete with examples of people living in the *Pah Sa-nguan* who have tried, and are still trying, to protect their local natural resource base. It behooves the RFD to tap this human resource. The delegation of enforcement powers, however, should not be unlimited.

F. Research

Much is still not yet known about the people who live in, or are dependent on, the *Pah Sa-nguan*. The foremost -- and apparently least recognized -- research gap may be the absence of any national or regional demographic estimates. Some of the other more conspicuous research gaps concern the extent and current viability of common property resource management systems, local agroforestry and protection capacities, future wood demand and supply for people directly dependent on the *Pah Sa-nguan* as well as for Thailand in general, and the amount of forest cover necessary for Thailand in general and for various regions and districts in particular.

G. Education, Training, and Networking

There is a substantial need to continue and strengthen ongoing education and training programs within the RFD and also to assist the RFD, NGOs, and forest communities in developing more open and productive lines of communication. Education, training, and networking hold great promise for developing more open and productive lines of communication.

At Kesetsart University, a significant step would be expansion of the curriculum²³³ to include courses that study indigenous forest management systems (as part of a silvicultural program as well as the social forestry program), teach methods to encourage participatory planning,²³⁴ and invite village forest committee members to lecture to forestry students.

Social forestry should not be isolated from the mainstream of forestry. A recent evaluation of world forestry programs concluded that the delimitation of social forestry as a particular area of forestry science and practice is unacceptable. Instead, all forestry should be social.²³⁵ All foresters, regardless of their specialties, should graduate with a commitment to serve the best long-term interests of Thailand's people and forests.

Another positive step would be the inclusion of courses that examine legal and social issues in

ways more sympathetic and responsive to the legal rights and predicaments of the rural population. Legal anthropology and legal sociology courses should be offered. If law professors are less rigid in their interpretation and analyses of national laws, openings for empowering forest managers will be established and students will be encouraged to develop creative interpretations to meet new problems and adapt to emerging conditions.

In the North and Northeast, networking has already begun among villages who have established community forests. This arrangement offers an excellent opportunity to create public awareness of forest conservation issues and build strong regional public support for the regulations established by village committees. Networking among NGOs concerned with forest conservation is already very well developed. The NGOs have begun to network with RFD staff and officials. Universities are playing an essential role in promoting networking links among village organizations, NGOs, and government agencies at the local, regional, and national levels. If these networking efforts continue to grow, they will be a remarkable demonstration of the strength of Thailand's growth toward democracy.

Public school and temple efforts in environmental education can build upon local knowledge of forest management, forest biota, and community organization efforts. Special efforts should be made to include activities whereby the younger generation can learn to respect and acquire the forest-based knowledge of their elders.

H. Development of Additional Conservation Incentives

Additional incentives should be developed to promote conservation. These might include tax exemptions for income generated through environmentally sustainable activities within the *Pah Sa-nguan*, payments to local people for the conservation and protection of areas important in biodiversity, additional programs which provide payment for reforestation, employment of forest farmers as forest guards, and the local use of access fees for entry into national parks.²³⁶

Conclusion

People have been living in the forests of what is today the Kingdom of Thailand for centuries. States, princes, and kings have come and gone, but local people continue to manage their forest resources. In many areas, local management practices are sustainable. Nevertheless, the RTG continues largely to overlook the potentials of people living in or dependent on the nation's forest resources. Few incentives, legal or otherwise, currently promote sustainable use and forest conservation by local populations.

Securing the tenurial rights and claims of environmentally astute forest users will provide a major incentive. This paper highlights the contributions and potentials of people living in or directly dependent on the "public" forest reserves of Thailand. It also proffers a strategy for empowering local forest managers pursuant to existing national laws.

As the forests of Thailand continue to diminish rapidly, pressures for new and innovative responses will increase correspondingly. The outcome is uncertain but the future is filled with hope and opportunity.

VI. Endnotes

1. *Pah Sa-nguan* is a Thai phrase that literally refers to restricted forests. In practice, the phrase refers to specific land areas that the RTG claims ownership of, including the exclusive right to extract timber and establish plantations, regardless of local preferences and land use practices. Less than one third of the *Pah Sa-nguan*, however, still has forest cover.
2. Ramitanondh 1989, 47. A similar conclusion was reached in two other Asian nations, India and the Philippines, which are even more severely deforested. See, e.g., Alcorn and Molnar 1990; Guha 1983; and CSE 1990; and Lynch and Talbott 1988. For insights into Indonesia's experience and its incremental movement toward empowering local forest managers, see Seymour and Rutherford 1990; Zerner 1990.
3. Ekachai 1992a and 1992b. The Project for Ecological Recovery in Bangkok has compiled English language clippings about the forced evictions and resettlement.
4. See e.g., Bangkok Post 1992; Ekkachai 1992.
5. Enacted on February 7, 1992, the act was published in volume 109, part 1, page 1 of the *Royal Gazette* on March 13, 1992.
6. Forest Act of 1941, Section 4(1).
7. National Forest Reserve Act, Sections 6 and 25.
8. Pongsapich 1989, Table 10.6, citing RFD statistics.
9. "Main Report," *Safeguarding the Future*, p. 20.
10. RFD, *Forest Cover in Thailand in 1988*, p. 3. The estimate is based on aerial photographs and LANDSAT imagery. Persistent cloud cover in some areas makes it necessary to rely on estimates for computing the national percentage.
11. Visetbhakdi 1989, 243; Pisit 1990, pers. com.
12. Hoamuangkaew et al. 1988, "Document 7", 2.
13. Brinkman 1989; Chuntanaparb et al. 1988; Sanguantam et al. 1988; Ekachai 1990, 41.
14. Ensuring that a patch of forest land is classified as degraded can be accomplished in various ways. One common method is to include forested and deforested areas in one classification tract.

This makes it possible to arrive at an average trees-per-hectare area, which can be applied to a large tract encompassing areas still forested. Another way is to actually degrade the area by cutting down a sufficient number of trees. Larry Lohmann 1991, pers. com.

15. Section 4(4).

16. Onchan 1990, 48 in Table 5.1. The rate of deforestation has been reportedly decreasing since the late 1970s. The reported decrease can be superficially misleading, however, unless two, interrelated factors are kept in mind. First, as actual forest cover decreases, there are fewer areas susceptible to deforestation. Second, although the rate of areal deforestation is decreasing, the percentage of remaining forests which is annually lost may actually be increasing.

17. Phantumvanit 1990, 4.

18. Lohmann 1990a, 9.

19. Phantumvanit 1990, 4-5.

20. Visetbhakdi, p. 249.

21. Lohmann 1990a, 10.

22. See the Appendixes for English versions of the bill and the proposed law.

23. See, e.g., Lynch 1990.

24. FAO 1988, 5; Poore 1989.

25. See, e.g., Sricharatchanya 1987, 7; Lohman 1990a, 8

26. Pragtong and Thomas 1990, 179; Visetbhakdi 1989.

27. Well-substantiated claims that the military and Thai timber companies are continuing to log forests along the borders are widely accepted in Thailand.

28. Tourism is a top foreign exchange earner.

29. A growing number of golf courses and tourist resorts, many owned by Japanese businesses, are being established throughout the *Pah Sa-nguan*.

30. Thomas 1990, pers. com.; Vaddhanaphuti 1990, pers. com.; Tankimyong 1990, pers. com. This fact is not unexpected given the similar state of knowledge in many other countries.

31. There is no official population estimate for the *Pah Sa-nguan*. Widely quoted, unofficial estimates hold that the *Pah Sa-nguan* encompasses 1.2 - 1.5 million households, 12,000 villages, and 7 - 12 million people.

32. Rojanalak 1990a.

33. Brockelman 1989, 490. As Thailand's farmers have resisted logging concessions and participated in agroforestry studies, forest management by farmers has slowly begun to be more widely appreciated by outsiders.

34. Alcorn 1989b, 74-75.

35. Informal planning by influential people for illegal logging purposes is also sometimes tolerated by government officials.

36. It is not possible to state the area under indigenous forestry in Thailand at this time. Some NGOs and universities are currently attempting a low-budget survey.

37. It has been suggested that the identifying mark of community forests is that villagers are responsible for them. Some are plantations, but most are natural forests. The standard RFD interpretation is that community forests are, by definition, plantations producing firewood for villagers.

38. During the process of villager-initiated consciousness raising within the RFD, "village woodlot" programs changed to "community forest" programs under the rubric of social forestry.

39. Judd 1964, 57.

40. For reviews, see Alcorn 1990; Olofson 1983.

41. Outsiders expectations influence what they see. See, e.g., Chuntanaparb et al. 1988, 55.

42. Potter 1975, 81-102; Surarerks 1986; Sektherra and Thodey 1975.

43. Chang 1976; Rerkasem and Rerkasem 1984.

44. Gorman.

45. Sektherrra and Thodey.

46. Van Liere.

47. See, e.g., Chareonsak 1987; E. Anderson 1986.

48. Chareonsak 1987.

49. Tankimyong 1987.
50. Kundstadter et al. 1978, 75; Kundstadter 1988.
51. Kunstadter 1978, 111.
52. Kunstadter 1988, 94.
53. Bragg 1989, 167.
54. Bragg 1989, 167.
55. Permpongsacharaen 1990, pers. com.; McKinnon 1989, 317.
56. E.g., Chuntanaparb et al. 1988, 41.
57. Hirsch 1989, 170.
58. Sanguantam et al. 1988.
59. Chuntanaparb et al. 1988.
60. Sanguantam et al. 1988, 39.
61. Sanguantam et al. 1988, 40.
62. Hoamuangkaew et al. 1988; Chuntanaparb et al. 1988.
63. Subhadhira et al. 1987, 92, 191, 313.
64. Brinkman 1989.
65. Chattip 1990.
66. Somsak 1990, pers. com.
67. Levin 1990, pers. com.
68. Brockelman 1989, 489.
69. Lohman 1990a, 17.
70. Brockelman 1989, 489.
71. Van Liere 1989, 151.
72. Fuengfah 1990, pers. com.
73. Sponsel and Natadecha 1988; Kriengkraipetch 1989.
74. McKinnon 1989, 315.

75. See, for reviews, Alcorn 1990; Olofson 1983.
76. Kunstadter 1980, 66; Kunstadter and Chapman 1978, 7.
77. Kunstadter and Chapman 1978, 9.
78. Kunstadter 1987, 135-142.
79. Kunstadter 1978; Kunstadter et al. 1978.
80. Zinke et al. 1978; Sabhasri 1978.
81. Komkris 1978, 69.
82. Kunstadter and Chapman 1978, 7-9.
83. Judd 1964, 5.
84. FAO 1988, 17.
85. Despite this negative image, analysis reveals that deforestation in the North attributed to hill tribes covered 7,360 km² over 23 years; while lowlanders were responsible for deforestation of 24,789 square kilometers (km²) of Northern forest during the same period. Bruksasri 1989, 10.
86. Kunstadter and Chapman 1978.
87. Kunstadter and Chapman 1978.
88. Kunstadter and Chapman 1978, 11.
89. Kunstadter and Chapman 1978, 10-11.
90. Kunstadter 1980, 67.
91. Kunstadter and Chapman 1978, 11.
92. Chuntanaparb and others (1988, 55) state "It is imperative to report that, in all cases, agroforestry in homeplots has not followed any conventional pattern There has been no such pattern as rectangular or square plots with rows of trees equally spaced around homes or in fields of the respondents." Also reported by Hoamunagkaew et al. 1978, 51.
93. Alcorn 1990, 142-43.
94. FAO 1989.
95. Although whether these specific plots occur within the forest reserve is not indicated, it is reasonable to assume that similar systems are found there.

96. Chuntanaparb et al. 1988; Hoamuangkaew et al. 1988.
97. Hoamuangkaew et al. 1988, 51.
98. Hoamuangkaew et al. 1988, 51.
99. Grandstaff et al. 1986; Hoamuangkaew et al. 1988, 51; Chuntanaparb et al. 1988, 55.
100. Gardens are typically 100-300 years old. Sawin 1990, pers. com.
101. Sawin 1990, pers. com.
102. Keen 1978, 256, 264; Sawin 1990, pers. com.
103. In Ban Pa Pae an average holding is 11 rai but it ranges from 0.5 ha (3 rai) to 32 ha (200 rai). Total holdings for the community of 175 families is 480 ha (3,000 rai).
104. Sawin 1990, pers. com.
105. Programs sponsored by His Majesty, the King of Thailand, are described in the United Nations Environment Programme's, *Sustainable Development of Natural Resources* 1988.
106. The Thailand Upland Social Forestry Project has 10 pilot project sites in four provinces in the North and Northeast. The program is funded by the Ford Foundation and implemented by the RFD's National Forest Land Management Division and the Ministry of Agriculture and Cooperatives, coordinated by Kesetsart University, Khon Kaen University, and Chiang Mai University. Pragtong and Thomas 1990, 180-81.
107. The express role of NGOs in Thailand is to distribute information and work at the grassroots level on issues involving basic needs.
108. Crop substitution programs promoting high value - high input crops have contributed to the growth of contract farming in the highlands. Khanchanapan 1988, 133.
109. In this case, the community forest belonged to a long-established Karen village. The police reportedly told the people from Ban Om Long, "You are all hill tribes and you are all living up there illegally. You have no right to stop deforestation." Villagers and researchers from Chiang Mai University, however, state that some Hmong are paying the RFD and the police a kick-back in order to grow their cash crops with impunity. Many Hmong have been quite successful as capitalists, abandoning cabbage production cleared from forest land after it is degraded and moving on to new forest in a variant of their

traditional long fallow system.

110. Mekloy 1990.

111. Ing 1987.

112. Mekloy 1990.

113. See, e.g., Kaye 1990. The supposed polarization is an example of how sympathetic outsiders can confuse an issue when they focus on ecology without knowing the complete local socio-cultural context. This polarity is one reason why some Thai environmental activists now feel that the alliance between environment and development is particularly dangerous. Not only are outsiders who do not know a country trying to direct its development projects, but outsiders are also trying to design conservation strategies that are also inappropriate.

114. Mekloy 1990.

115. Ekachai 1990.

116. Moerman and Miller 1989, 307.

117. Ekachai 1990, 63-64.

118. Ekachai 1990, 63.

119. Lohmann 1990b.

120. Ekachai 1990, 46-48.

121. In nearby Bangladesh, exploitation of frogs and reptiles has decimated populations, and the business they once generated has collapsed.

122. Alcorn 1989b.

123. Scott 1976. The strength of the moral commitment to subsistence resources should not be underestimated. In Southeast Asia, rebellions have generally arisen when subsistence resources, including forests, have been alienated from peasants and other forest dwellers. It has been proven numerous times that rural peoples will die to protect biodiversity important to their subsistence.

124. Villager quoted by Kanjanawanawan and Kornkig 1989.

125. Ganjanipan 1900, pers. com.; Porthrip Boonkrob 1900, pers. com.

126. Similar trends have been noted in Mexico, where Huastec farmers with off-farm employment were more likely to maintain forest groves and have larger forest groves. Alcorn 1989a, 145.

127. Pragtong and Thomas 1990, 169; Ramitanondh 1990, 33-34. The FIO has no special expertise in logging or timber production. Its board of directors is comprised of political elites. Concessions are awarded only to national governmental parastatals (i.e., state enterprises), nonprofits, military veterans organizations, and provincial government parastatals. They in turn select, from among their friends and supporters, private contractors who may in turn subcontract to smaller private firms to do the actual logging, transport, etc. The system, typical of many tropical countries, is essentially a way of distributing wealth within particular political alliances in order to maintain their strength.

128. Pragtong and Thomas 1990, 169.

129. Pragtong and Thomas 1990, 172. Reserve declaration proceeded slowly. By 1980, reserves were formally demarcated and declared over 36 percent of the land area, but at the same time less than 32 percent of the land was forested. Pragtong and Thomas 1990, 175. All the reserved forests, including protected areas, were covered by concessions.

130. Permpongsacharoen 1989.

131. Permpongsacharoen 1990. The conclusion was based on RFD figures.

132. Permpongsacharoen 1990; Visetbhakdi 1989, 245, 248.

133. In particular, there is a long tradition of graft by forest guards in Southeast Asia. See, for example, Scott 1976, 135.

134. Permpongsacharoen 1990, 3-5. One bureaucrat interviewed stated that the government finally instituted the logging ban because the government was "like the man who finally cried when he saw his own coffin." Widespread protest against logging had threatened the political status quo.

135. As hill tribes become a tourist commodity, however, there are some growing pressures to allow them to stay in restricted areas.

136. Fuengfah 1990, pers. com.

137. In addition, a new threat is that mining will be allowed in protected areas. This change will give further incentives to elites to remove forest from villagers through the protected area laundering process. Permpongsacharoen 1990, pers. com.

138. In the words of the village headman (and tambon leader): "This is our community forest that was just put inside the new national park. We have been here for over 150 years. We protected this forest before the roads were put in. We set up a roadblock on the new road to stop the illegal logging. We caught the district police and arrested him for logging. We warned him not to come again. We can protect the forest, but we need the state behind us. Without the help of the state, it cannot be done. We want to follow the middle way. We need cooperation between the village and the government."

139. Buakesorn 1990.

140. Anonymous, "Villagers' rally . . .," 1990.

141. Tangwisuttijit 1990.

142. At present, twenty percent of Thai golf course members are Japanese.

143. It is common practice for influential people to acquire land from the RFD by renting degraded forest.

144. Kanjanawanawan and Kornkig 1989.

145. Alcorn fieldnotes from Ban Pa Pae.

146. Puumkacha 1990, pers. com.

147. See, e.g., Jetenewait et al. 1990.

148. Lohmann 1990a, 14.

149. PACMAR 1989.

150. Phantumvanit 1990.

151. Lohmann 1990a, 12. Shell subsequently revised its request downward to 107 km², and then provisionally lowered it even further.

152. Visetbhakdi 1989, 249.

153. Ekachai 1990, 53-55.

154. Ekachai 1990, 60-61.

155. Information provided by staff of the Youth Training Program and the Human Rights and Ecology for Sustainable Recovery Program.

156. UCL 1988.

157. Ramitanondh 1989, 27.
158. Sermsri 1989, 75.
159. See, e.g., Sermsri 1989.
160. Permpongsacharoen 1989.
161. Pintoptong 1990.
162. Feeny 1988, 117
163. Lohmann 1990b, 3. There were virtually no roads in the Northeast until the 1960s. Hirsch 1989, 87; Pragtong and Thomas 1990, 174. Much of the infrastructure created during this period was aimed at building local political support for the nation state.
164. Visetbhakdi 1989, 247; Ramitanondh 1989.
165. Hafner and Apichatvullop 1990, 198; Subhadhira et al. 1987, 39.
166. This practice is a customary way to claim land rights without occupying or clearing the forest.
167. Kunstadter 1990, pers. com.; Hirsch 1989, 92; Ramitanondh 1990, pers. com.
168. Rigg 1987; Hirsch 1989; Hafner 1990, 77-79.
169. Ramsay 1982, 178.
170. Knowland 1990, pers. com.
171. Lohmann 1990b, 11.
172. FAO 1988, 5-6.
173. Hirsch 1989, 87-88; Pragtong and Thomas 1990, 174.
174. Ramsey 1982; Donavanik 1989.
175. Khanchanapan 1988.
176. Kunstadter 1980, 67; Kunstadter 1988.
177. Shinawatra 1990, pers. com. No information was available on whether northeastern migrants moved into existing community forests.
178. Alcorn 1990, 141-143.

179. There is considerable confusion as to when, and pursuant to what law, the claim was made. Amara Pongsapich cited Ministry of Justice Document 74/3425 and wrote that "the first land law" promulgated on April 1, 1892 indicated that "all land belonged to the King." Amara Pongsapich, "Action Plan for a Private Tree Farm Development Program, Thailand: A Socio-Commercial Approach," *Socio-Economic Aspects, Annex 10* (Bangkok: PACMAR, Inc., 1989), 5.

180. Hirsch 1990, 166. These local leaders were described as feudal chiefs whose "forests were recognized, in general, as properties to be maintained . . . and passed on to their heirs. According to the property rights of the day, the chiefs allowed concessionaires to exploit the teak forests The deterioration of the forests was evident and disputes among the concessionaires were widespread" (TDRI 1987, 83).

181. Chuntanaparb and Wood 1986, 79. The establishment of the RFD coincided with the appointment of an Englishman as the Conservator of Forests. The Englishman, H. Slade, had worked with the Forest Service of India and was reportedly the person who recommended that ownership of all forests be transferred to the state.

182. TDRI 1987, 83.

183. Yano 1968, 853.

184. Pongsapich 1982, 7.

185. The claim certificate is not specifically provided for in the Land Code. It merely provides official documentary proof of the date and existence of a land rights claim.

186. Land Code, Sections 1, 30, and 58.

187. Announcement of the Revolutionary Party No. 96, dated February 29.

188. See, e.g., Forest Act of 1941, as amended, Sections 54 and 72.

189. Section 4(1).

190. National Reserved Forests Act, Sections 14 and 31.

191. National Park Act (1961), section 3. See also Wildlife Conservation Act (1960).

192. Ratanakhon 1978, p. 49.

193. Some of these areas may be converted into protection forests by being designated as 1A under a recently established watershed protection classification system.

194. Game Preservation and Protection Act, Sections 23 and 24; National Park Act, Sections 6 and 16.
195. Pragtong and Thomas 1990, 172. The authors commented that the "extent to which the influx [of migrants into forest reserves] was stimulated by Kukrit's 1974 amnesty proclamation is often debated" (174).
196. Chuntanaparb and Wood 1986, 41.
197. For a comprehensive overview of existing projects and programs see Chuntanaparb and Wood 1986; Feder et al. 1986; Onchan 1990.
198. These programs were designed after the social forestry program of India despite the radical differences between the Indian and Thai situations. Viriyasakultorn 1990, pers. com. In India, most villages have severely degraded public grazing lands and no access to natural forest.
199. FAO 1989; Hoamuangkaew et al. 1988, "Document 7", 51.
200. The quandary in pursuing this tack, however, lies in the fact that many community forests are technically illegal at the present time since they are ostensibly on government-owned land.
201. Interview with the RFD Community Forestry Extension and Development section.
202. A flyer from Chiang Mai regional RFD office lists one project that has been approved and six that are under consideration, including Ban Huay Kaw. Many forest farmers are not interested in participating because of suspicions about future RFD regulation, limitations on the size of claim, etc. There is also a tradition to avoid interaction with the government if possible in order to avoid being forced to observe government laws and regulations.
203. A successful military coup d'etat in February 1991 undermined the prospective efficacy of the 1978 constitution. Official drafts of a new constitution, however, indicate that most provisions on natural resources, including those contained in Section 33, will likely be ensconced in the new constitution.
204. Sections 4 and 31 of the 1978 constitution guarantee equal protection of law to the Thai people. Section 33 requires that "fair compensation shall be paid in due time to the owner" of the property right. "The amount of compensation . . . shall take into consideration the mode of acquisition, nature and condition of the immoveable property, as well as the cause and purpose of the expropriation, so as to serve social justice."
205. Section 18 requires that "Compensation shall be given to . . . the legitimate owner or possessor of land to be expropriated."

206. Although Thailand was never colonized, since the late 19th Century, Thai land laws have been based on Roman and European (primarily Germanic) codes. Although the principle of aboriginal title is rooted in Roman law, Thai land laws are not officially interpreted as requiring the recognition of undocumented indigenous territorial rights.

207. Lindley 1926, 338-353. See also Bennett 1978a, 618-20.

208. Lindley 1926, 337.

209. Lindley 1926, 10.

210. *Summa Theologiae*, II-II, Question 10, Tenth Article.

211. English translations can be found in Scott 1934, Appendixes A and B.

212. Vitoria 1539, Section I, Twenty-fourth premise.

213. Lindley, 80. See also Bennett 1978a.

214. Lindley 1926, 43.

215. Paragraph 81. Portions reprinted in McDougal and Reisman 1981, 639-658.

216. The decision left unresolved the standards to be used in determining whether an indigenous group is "socially and politically organized" and possesses "competent" leaders and representatives.

217. Crawford 1989, 19.

218. Other relevant sections include Article 1.1 which recognizes that "All peoples have the right to self-determination." This encompasses the right to "freely determine their political status and freely pursue their economic, social and cultural development." Article 1.2 is more explicit: it provides that "in no case may a people be deprived of its own means of subsistence." Massive, state-sanctioned displacement of peasants and tribal peoples would, by definition, be a violation of this article. Article 16 adds that "everyone shall have the right to recognition everywhere as a person before the law." Article 17 proscribes "arbitrary . . . interference with . . . privacy, family, [and] home." The rights of "peaceful assembly" and "freedom of association" are recognized in Articles 21 and 22. The right to participate in public affairs is acknowledged in Article 25.

219. NGO Coordinating Committee 1989, 2-9.

220. See Charit and Phutaraporn 1990.
221. Local Development Institute 1990, 8.
222. Community forestry research group, 16.1.
223. Poopat 1990.
224. For a more expanded discussion regarding community-based tenurial strategies see Lynch 1992.
225. For background on the nature of community-based management systems and, in particular common property, see Berkes and Feeney 1990; Lynch 1990; Runge 1986.
226. See, e.g., Southgate and May 1990.
227. For more general insights into the nature of customary land tenure see Crocombe 1971.
228. See, e.g., Mehl 1986; Kemp 1981.
229. As previously discussed in Section 4.3.2.2, the leading international human rights instrument calling for recognition of indigenous territorial rights is the ILO's 1989 Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries. Article 13 of the convention specifies that references in it to land "shall include the concept of territories, which covers the total environment of the areas which the people concerned occupy or otherwise use."
230. See, e.g., Lynch and Talbott 1988; Moniaga 1991.
231. Roy 1991.
232. These recommendations concerning legal personality are premised on a community being largely homogenous. When communities are internally divided by class or ethnic differences, politically equitable processes of decision-making should be established before any formal recognition or grant of community-based tenurial rights.
233. Social forestry majors at Kesetsart are required to take 6 credits of sociology and 6 credits of anthropology, as well as 16 social forestry credits, 2 of which include field work. Redhead 1987, 37.
234. See, e.g., Participatory Rural Appraisal Handbook 1990.
235. Westoby 1989, 217.

236. The latter recommendation is legally supported by Section 23 of the National Park Act. It allows income generated by national parks to be retained for their maintenance.

APPENDIX I

Forest Plantation Act
February 7, 1992
(Unofficial English Translation)

Whereas it is proper to enact a forest plantation law.

Section 1

This Act shall be called "the Forest Plantation Act B.E..."

Section 2

This Act shall come into force on and from the day following its publication in the Government Gazette.

Section 3

In this Act:

"Forest Plantation" means the land registered in accordance with Section 5 for planting and nurturing trees of restricted species.

"Trees" mean the trees already exist and the new ones grown in order to utilize them for timber or wood and/or other purposes.

"Wood" means tree and the following:

- (1) other parts of tree whether or not cut, logged, sawn, split, stripped, dug out or fashioned up in any way, and;
- (2) converted wood, wooden furniture, utensils, and other products made from tree or any part of tree.

"Marking Hammer" means any instrument or tool invented for the purpose of causing any mark or symbol on wood.

"Letter of Application Endorsement" means the letter or its copy issued by the Competent Officer to endorse that an application has been received by him/her.

"Forest Planter" means an individual who receives a document endorsing the use of land for forest plantation, or the person who applies for the transfer of ownership of forest plantation plot.

"Competent Officer" means a person appointed by the Minister of Agriculture and

Cooperatives to execute any duty under this act.

“The Forest Plantation Registrar” means the Director General of the Royal Forest Department or the person appointed by him/her within the vicinity of Bangkok, or the Provincial Governor or a person appointed.

“The Director General” means the Director General of the Royal Forest Department.

“The Minister” means the Minister in charge and control of the execution of this Act.

Section 4

The land plot to be registered as a forest plantation must be under one of these categories:

- (1) The land plot with a deed or a document endorsing the use of that land in accordance with the Land Act.
- (2) The land plot with an official letter indicating that it is in the process of receiving a land deed or document issued in accordance with the Land Act, owing to the fact that the land has already been occupied and cultivated by a particular person in accordance with the land plot arrangement law and the law on land allocation for making a living.
- (3) The land within the land reform area in accordance with the Land Reform Act, which has a document to prove that it is allowed to be leased or hire-purchased.
- (4) The land with a document allowing an individual to plant wood trees in the improvement area of a national forest reserve or in a deteriorated forest, in accordance with the National Forest Reserve Act.
- (5) The land which has been allocated to a state enterprise or any government agency for use or utilization.

Section 5

An individual with ownership, right of occupation or the right to make use of the land according to Section 4, wishing to use the plot for commercial forest plantation, is required to register the plot according to the regulations set by the Director General with the Forest Plantation Register. The applicant is approved by the Forest Plantation Registrar.

In the case that the applicant is a land lessee or a hire-purchaser of the land plot to be used as a forest plantation and the land is covered under Section 4 (1), he/she is required to show the lease or hire-purchase contract, together with an endorsement letter from the land owner.

Section 6

The Forest Plantation Registrar is entitled to consider whether or not to accept an application for a forest plantation, and to inform the applicant within 15 days after receiving the application according to Section 5, or after receiving a report on inspection of the land plot according to Section 7.

Registration and issuance of a letter of approval of a forest plantation are to follow the regulations, rules and conditions set by the Director General.

In case that the Forest Plantation Registrar issues an order not to accept a plot of land for registration as a forest plantation, the applicant has the right to appeal to the Minister within 30 days after the date of refusal by the Forest Plantation Registrar. The Minister's deliberation and decision is final.

Section 7

Before registering any land plot as a forest plantation according to Section 6, if it is evident that the land plot is covered under Section 4 (4), the Registrar is entitled to instruct the Competent Officer to inspect and make a report on the location, soil condition, and species, sizes and quantities of wood trees in the land plot to be registered as a forest plantation. In the case that the wood species requires the permission according to the National Forest Reserve Act, the Competent Officer is entitled to make records on such species and compile them in his/her report according to the regulations or methods set by the Director General with the approval from the Minister. The Competent Officer is required to submit the report to the Registrar within 30 days after getting the instruction.

After receiving the report of inspection, the Registrar is entitled to instruct the Forest Planter to collect forest products, clear, cut, and fell wood trees; and compile, burn and destroy or preserve the wood and forest products in the land plot. The Forest Planter is required to pay for all expenses for carrying out these activities. The regulations and methods of carrying out the activities are set by the Director General with the approval from the Minister.

The wood and forest products acquired from these activities well belong to the State.

Section 8

For the benefits of collection of technical forestry information and data, keeping statistics of tree growth, evaluation of forest plantation activities, and follow-up of the enforcement of this law, the Competent officer is empowered to enter the forest plantation for inspection and giving advice to the Forest Planter.

In order to carry out his duty, the Competent Officer is required to show his/her identification card to the person/persons involved in the forest plantation, and the latters are required to provide reasonable cooperation to the Competent Officer.

The Competent Officer's identification card has the format, designed in accordance with the Ministerial Regulations.

Section 9

The Forest Planter is entitled to have his/her own "marking hammer" to identify the ownership of wood and of forest products from the plantation. The marking hammer is

applicable only after it has been registered.

The marking hammer is an instrument to cause a mark or symbol on the wood to be felled by the Forest Planter, and it has to be approved by the Forest Plantation Registrar and has to have a logo stamped by the Registrar.

Application, accepting the application, issuance of registration letter for the marking hammer, approving the marking hammer, and the methods of causing the mark or symbol on the wood and forest products, have to follow the regulations, rules and conditions set by the Director General with the approval from the Minister.

Section 10

in exploiting or utilizing wood trees from the forest plantation, the Forest Planter is entitled to cut and fell the wood trees, converting the wood, sell the wood, storing them, and transport the wood through the forestry checkpoints. However, establishment of a wood conversion factory is covered by the existing Forest Act.

Section 11

Before cutting or felling trees from forest plantation, the Forest Planter is required to inform in writing to the Competent officer so that the latter could issue a letter of endorsement to allow such activities. After he/she has informed the Competent Officer, the Forest Planter could carry out such activities.

The informing and endorsement are to follow the regulations, rules, and conditions set by the Director General. The Forest Plantation Registrar may set any other conditions concerning cutting, felling, marking, stamping on the wood to be followed by the Forest Planter.

Section 12

The Forest Planter is required to keep the letter of endorsement at the forest plantation in order to show the Competent Officer at all times that tree cutting or felling is carried out.

Section 13

The wood items that are to be transported out of a forest plantation must have the Forest Planter's hammer mark (or logo) to indicate the ownership. To do this, the Forest Planter must carry along the letter of endorsement together with the list of wood items. This is to follow the regulations, rules, and conditions set by the Director General with the approval from the Minister.

Section 14

All wood and forest products from the forest plantation are not subject to payment of royalty or forest maintenance fees according to the existing forest legislatures.

Section 15

For the purpose of inspection of tree cutting and felling, and transporting the wood from the forest plantation, the Forest Planter is required to keep the letter of endorsement of the list of wood items and other important documents, concerning with these activities, at the forest plantation in order to show the competent Officer according to regulations and period set by the Director General.

Section 16

In case that the forest plantation registration document or the letter of endorsement is lost, damaged or destroyed, the Forest Planter is required to apply for the substitute document to the Forest Plantation Registrar.

The application for and issuance of the substitute documents are to follow the regulations set by the Director General.

Section 17

In case the Forest Planter wishes to cancel his/her marking hammer, it is required that he/she informs in writing and brings the marking hammer to be destroyed in front of the Competent Officer.

In case that the marking hammer is badly damaged or lost, the Forest Planter is required to inform in writing to the Competent Officer within 30 days after he/she learned about the damage or the loss. As for the badly damaged marking hammer, it is required that the Forest Planter brings it to be destroyed in front of the Competent Officer.

The report of cancellation of the marking hammer, the acknowledgment of the cancellation, and the change of the registration number of the marking hammer, have to follow the regulations, methods and conditions set by the Director General with the approval from the Minister.

Section 18

In case that the Forest Planter wishes to discontinue engaging in forest plantation activities, he/she is required to inform in writing to the Competent Officer and bring his/her marking hammer for destruction in front of the Competent Officer. Then it is considered that the forest plantation registration is terminated.

Section 19

In case that the Forest Planter dies, or wants to transfer the ownership or occupation right over the forest plantation land to another person, or in the case that the Forest Planter's lease or hire-purchase contract is abrogated, his/her inheritor or the new owner or occupier of the forest plantation land is required to apply for the transfer of the right over the forest plantation to the Forest Plantation Registrar within 180 days after either of the above incidents has occurred. If no application is made within this period, it is automatically considered that the registration letter is terminated.

A transferee to the rights over a forest plantation is entitled to enjoy the same rights and privileges as the former Forest Planter. This is to follow the regulations set by the Director General.

Section 20

In destroying the marking hammer according to Section 17 and Section 18, it is required to follow the regulations and methods set by the Director General with the approval from the Minister.

Section 21

Any person who has the transferred rights over various wood items from a forest plantation, is required to have evidences of acquiring them legitimately according to this law: This is to follow the regulations set by the Director General.

The transferee of the rights over the wood items according to the first paragraph, may sell, store, or transport them through the forestry checkpoints. However, the conversion of the wood has to follow the existing forestry laws.

It is considered that any wood from a forest plantation is the wood that the person who gets the permission according to Chapter 4 (control of wood conversion) of the Forest Act B.E. 2484 (1941) has the right of possession.

Section 22

In carrying out the duties under this Act, the Forest Plantation Registrar and the Competent Officer are the Officer in charge according to the Criminal Code.

Section 23

Whoever acts in contravention of the provision of Section 8 shall be punished with imprisonment not exceeding one month or with a fine not exceeding 2,000 Baht, or both.

Section 24

Whoever uses the marking hammer to stamp or cause any mark or symbol to indicate the ownership of the wood which does not come from forest plantation activities, shall be punished with imprisonment not exceeding one year, or with a fine not exceeding 30,000 Baht, or both.

Section 25

Whoever uses the marking hammer to cause a mark or symbol of ownership on the wood acquired from a forest plantation which is in contravention of the provision of Section 9, paragraph 3, or of the conditions set by the Forest Plantation Registrar according to Section 11, paragraph 2; or brings out the wood from the plantation without bearing the owner's mark; or without a list of wood items being transported according to Section 13; or acts in contravention to Section 13, shall be punished with imprisonment not exceeding six months,

or with a fine not exceeding 10,000 Baht, or both.

Section 26

Any Forest Planter who does not keep the letter of (registration) endorsement at his/her forest plantation according to Section 12; or does not keep the letter endorsing the list of the wood items, or other important documents according to the regulations and period set by the Director General, according to Section 15, or who fail to inform about the bad damage or loss of the marking hammer; or who fail to bring the badly damaged marking hammer for destruction according to Section 17, paragraph 2, shall be punished with imprisonment not exceeding one month, or with a fine not exceeding 2,000 Baht, or both.

Section 27

In case that the violators who are subject to punishment under this Act are legal entities (companies or corporations), the managing directors, managers or representatives of these bodies are to receive the punishment stipulated in each violation, unless they can improve innocent of the violation.

Section 28

The Minister of Agriculture and Cooperatives shall take charge and control of the execution of this Act. The Minister is empowered to appoint Competent Officers and issue Ministerial Regulations to supplement the enforcement of this Act.

The Ministerial Regulations shall become in force after being published in the Government Gazette.

A correct version according to the National Legislative Assembly, acting on behalf of the Parliament.

Mr. Pitoon Poomhiran
Director of Convention Division

APPENDIX II

Thailand Community Forestry Act (English translation of August 1991 official draft)

Section I

This Act is called "Community Forest Act of 19??" [As of June 1992, this law had not been enacted]

Section 2

This Act will be effective from the day after the announcement in the Thai Royal Gazette.

Section 3

This Act will override previous laws, regulations, and any other rules that are the same as or conflict with provisions in this Act.

Section 4

Definitions Used in this Act:

"Community Forest" means "forest or national reserved forest land that has been previously designated under the Forest and National Reserved Forest Act and are designated as community forest under this Act."

"Village Committee" means "the village committee that has been appointed under the Local Administration Act, including the village committee, which is set up pursuant to this Act."

"Officials" means "persons who are appointed and assigned by the Minister to work along with this Act."

"Director General" means "Royal Forest Department Director General."

"Minister" means "the Minister who is responsible for implementing this Act."

Section 5

A village community that wants to use forest land located near the village, and which is suitable to be established as community forest, shall submit an application to the appropriate officials along with the approval of the local tambol board, pursuant to the procedures and regulations established by the Director General.

In case there is no current village committee designated by the Local Administration Act, villagers can select the committee pursuant to regulations established by the Director

General.

Section 6

After receiving a request from a village committee, officials will determine the suitability of the area proposed to be established as a community forest. This determination shall be made and a report submitted to the Director General within 60 days pursuant the procedures and regulations established by the Director General.

Section 7

After receiving the report referred to in Section 4, the Director General has authority to approve the request by publishing an announcement in the Royal Gazette which shall be accompanied by a map identifying the community forest area.

Section 8

Any boundary change or withdrawal of any part or all of a community forest shall be announced by the Director General in the Government Gazette. A map indicating the change shall be published along with the announcement.

Section 9

A village committee is responsible for installing and maintaining border poles and sign boards which clearly indicate the boundary of the community forest.

Section 10

Occupying, utilizing, living in, constructing, clearing, burning, logging, and the gathering of forest products, within a community forest area, or any other activities that degrade a community forest are prohibited, except:

- (1) logging, collecting or otherwise using forest resources pursuant to Sections 12 and 14,
- (2) activities that are conducted by a village committee pursuant to Section 15,
- (3) activities that are conducted by officials pursuant to Section 16.

Section 11

According to the regulations in Section 12, villagers are legally allowed to cut trees, collect forest products, process timber, store wood or other forest products, establish a wood processing factory based on man-power, and transport these products through forestry checkpoint. A wood processing factory based on machine-power sources shall only be established pursuant to the Forest Act.

Section 12

Trees can be cut and forest product can be collected from a community forest, subject to the following conditions:

(1) Natural trees can be used for an individual or community consumption;

(2) Planted trees and forest products can be used for individual, community consumption, or for commercial purposes.

Wood or forest products collected from community forest for an individual or community purpose are exempted from the payment of royalties or forest improvement fees pursuant to Forest Act or National Reserved Forest Act. Forest products utilization for commercial purposes are not exempted from taxation.

Any other activities conducted pursuant to this section shall also be in accordance with village committee regulations.

Section 13

Income from selling wood and forest products pursuant to Section 12 are exempted from any taxation. A village committee can use this income for the maintenance and improvements of the community forest or for other public activities pursuant to village committee regulations and approved by the Director General.

Section 14

A village committee has the right to establish regulations for land utilization within the community forest area subject to the approval of the Director General.

Section 15

A village committee is responsible for maintaining, protecting, planting trees, and improving the community forest according to village committee regulations approved by Director General.

Section 16

Government researchers and technicians are allowed to conduct studies, research and exploration in a community forest, and the village committee shall cooperate with them. Researchers and technicians shall present their identification and the written authorization to the president of a village committee before beginning their activities in a community forest.

Section 17

The Director General has authority to withdraw a community forest in the event that:

(1) a village committee does not install border poles and sign boards as provided in Section 9.

(2) a village committee fails to maintain, protect, and improve the community forest as provided in Section 15.

Section 18

Any person who obstructs a government official conducting research or other activities authorized in Section 16 shall be liable for imprisonment of up to 1 month or fined up to 1,000 Baht, or both.

Section 19

Any person who violates the prohibitions described in Section 10 shall be liable for imprisonment from 1 to 20 years and a fine of 5,000 to 200,000 Baht.

Section 20

The Minister of Agriculture and Cooperative is responsible for implementing this Act and is authorized to appoint the “officials.”

Bibliography

Agricultural Land Reform Office. 1990. Policy on agricultural land reform in Thailand: Final report. Bangkok: Thailand Development Research Institute Foundation.

Alcorn, Janis B. 1989a. An economic analysis of Huastec forest management, pp. 182-206. In John Browder, ed., *Fragile lands of Latin America: Strategies for sustainable development*. Boulder, Colorado: Westview.

Alcorn, Janis B. 1990. Indigenous agroforestry strategies meeting farmers' needs. In Anthony B. Anderson, ed., *Alternatives to deforestation: Steps toward sustainable use of the Amazon rain forest*. New York: Columbia University Press.

Alcorn, Janis B. 1989b. Process as resource: The agricultural ideology of Bora and Huastec resource management and its implications for research. Pp. 63-77 in D. Posey and W. Balee, eds. *Natural resource management by indigenous and folk societies in Amazonia*. New York: New York Botanical Garden (Advances in Economic Botany series).

Alcorn, Janis, and Augusta Molnar. 1990. Deforestation and forest-human relationships: What can we learn from India? Paper presented at A Symposium on Tropical Forest Ecology, the Changing Human Niche, and Deforestation. American Anthropological Association, New Orleans.

Anderson, Douglas D. 1989. Prehistoric human adaptations to environments in Thailand, pp.101-123. In *Culture and environment in Thailand*. Bangkok: Siam Society.

Anderson, Edward F. 1986. Ethnobotany of hill tribes of northern Thailand. *Economic Botany* 40:38-53.

Another Step -- Progress of Community Forest (in Thai). 1990. *NGO Newsletter* 5:12-15.

Aquinas, Thomas. [Circa 1260] 1964. *Summa theologiae*. New York: McGraw Hill.

Ashton, Peter S. 1989. Thailand: Biodiversity center for the tropics of Indo-Burma, pp. 51-58. In *Biodiversity in Thailand, Proceedings of a seminar sponsored by USAID 16-17 October*, Chiang Mai University.

Bennett, Gordon. 1978a. Aboriginal title in common law: A stony path through federal doctrine. *Buffalo Law Review* 27:617ff.

Bennett, Gordon. 1978b. Aboriginal title in international law. London: Royal Anthropological Society.

Berkes, Fikret, and David Feeney. 1990. Paradigms lost: Changing views on the use of common property resources. *Alternatives* 17(2).

Boontorn, Jaturong B., Sayamol Kaiyoorawongs, and Santichai Chaykert. 1988. "Hill tribes and human rights. Union for Civil Liberty Newsletter. July/December 16-19.

Bragg, Katherine. 1989. The Akha: Folk botany and forest traditions. In Chiang Mai, ed., A northern miscellany: Essays from the north of Thailand. Suriwongs Book Center: Jareuk Publications.

Brinkman, Willemine, ed. 1989. Why natural forests are linked with nutrition, health, and self-reliance of villagers in northeast Thailand. Phu Wiang, Khon Kaen Province. Royal Forest Department, United Nations Development Program, and food and Agriculture Organization of the United Nations. Fo:DP/THA/84/00w Field Document 6.

Brockelman, Warren Y. 1989. Approaches to environmental protection, pp. 475-93. Culture and environment in Thailand. Bangkok: Siam Society.

Bruce, John W., and Louise Fortmann. 1989. Agroforestry: Tenure and incentives. Madison, Wisconsin: Land Tenure Center.

Bruce, John W. 1989. Community Forestry: Rapid Appraisal of Tree and Land Tenure. Rome: Food and Agricultural Organization.

Bruksasri, Wanat. 1989. The principle hill tribe problem: Tribal deforestation and its solution. *Life on the Mountain* 1(2):815.

Buakesorn, Anunchon K. 1990. Villagers protest land designation. *The Nation*. 15 November.

Center for Science and Environment (CSE). 1990. Towards green villages. CSE: New Delhi.

Chamberlain, James L. 1989. Forestry aspects of extension. Action plan for a private tree farm development program, Thailand: A socio-commercial approach, Annex 5. Bangkok: PACMAR, Inc., in association with A&R Consultants.

Chang, T.T. 1976. The origin, evolution, cultivation, dissemination and diversitification of Asian and African rices. *Euphytica* 25:425-41.

Chapman, E.C. 1983. The Huai Thong Choa project: Its role, environmental setting, and objectives, *Mountain Research and Development*, 3 (4): 318-25.

Chareonsak, Surapon. 1987. Case study of Ban Pae, On Thuy, San Khampaeng, Chiang Mai. In Royal Forest Department (RFD), ed., Community forest in Thailand: Management of land in national restricted forest. Bangkok: RFD.

Charit, Tingsabadh and Kobkul Phutaraporn, eds. 1990. People and Forestry in Thailand: Status, problems and prospects. Proceedings of a conference organized by Chulalongkorn University Social Research Institute (CUSRI), September 1988. Bangkok: CUSRI.

Chattip, N. 1990. Village economy on the past (1455-1855) (in Thai). Bangkok: Sangsarn Press.

Chuntanaparb, Lert. 1989. Policies and institutions. Action plan for a private tree farm development program, Thailand: A socio-commercial approach, Annex 1. Bangkok: PACMAR, Inc., in association with A&R Consultants Co.

Chuntanaparb, Lert, P. Sanguantam and P. Prasomsin. 1988. Multi-resource information for the development of Tab Lan Forest communities, Soeng Sang, Nakhon Ratchisama, Northeast Thailand. (KU/Ford Foundation 870-0535, Working Document No. 6.)

Chuntanaparb, Lert and Henry I. Wood. 1986. Management of degraded forest land in Thailand. Bangkok: Kesetsart University.

Colchester, Marcus. 1990. The international tropical timber organization: Kill or cure for the rainforests? Draft paper prepared by the Director of the Forest Peoples Programme, World Rainforest Movement, Chadlington, U.K.

Crocombe, Ron. 1971. An approach to the analysis of land tenure systems, In Ron Crocombe, ed., Land tenure in the Pacific. Melbourne: Oxford University Press.

Davis, Shelton. 1988. Indigenous peoples, environmental protection and sustainable development. In L. Stephanie Flanders, ed., Gland, Switzerland: International Union for the Conservation of Nature.

Different perspectives on forest plantation act (in Thai). 1990. Interviews with Songpan Jetenewanit, Witoon Permpongsacharoen, Kelsan Atipo. Development Advocate 3: 45.

Donavanik, Preyaluk. 1989. The quadripartite system: A new approach to land reform. Bangkok Bank Monthly Review, June 230-37.

Donovan, Deanna G. 1989. Rehabilitation and development of forest and upland resources in the storm damaged areas of southern Thailand. In Safeguarding the future: Restoration and sustainable development in the south of Thailand. Bangkok: National Economic and Social Development Board and U.S. Agency for International Development/Thailand.

Dove, Michael. 1983. Theories of swidden agriculture and the political economy of ignorance. Agroforestry Systems 1: 85-99.

Ekachai, Sanitsuda. 1990. Behind the smile: Voices of Thailand. Bangkok: Post Publishing.

Eudey, Ardith A. 1989. 14 April 1986: Eviction orders to the Hmong of Huai Yee village, Huai Kha Khaeng Wildlife Sanctuary, Thailand, pp. 249-59. In John McKinnon and Bernard Vienne, eds., Hill tribes today.

Faculty of Economics, Thammaset University. 1989. The future of Thai forests and the role of the cabinet (in Thai). Seminar discussion paper, 2 May.

Food and Agriculture Organization of the United Nations (FAO). 1988. Forestland for the people: A forest village project in northeast Thailand. Bangkok, FAO.

Food and Agriculture Organization of the United Nations (FAO). 1989. Agroforestry: Initiatives by farmers in Thailand. Bangkok, Regional Office for Asia and the Pacific, FAO. RAPA Publication:1989/13.

Feder, Gershon, et al. 1986. Land ownership security, farm productivity, and land policies in rural Thailand. Washington, D.C.: World Bank.

Finnish International Development Agency. 1989. Master plan for forestry development in Thailand. Terms of reference. Bangkok: Government of Finland, United Nations Development Programme, Royal Thai Government.

Gorman, C.F. 1970. Excavation at spirit cave, north Thailand. *Asian Perspectives* 13:81-108.

Grandstaff, Somluckrat W., Terry B. Grandstaff, Pagarat Rathakette, David E. Thomas, and Jureerat K. Thomas. 1986. Trees in paddy fields in northeast Thailand, pp. 273-92. In Gerald G. Marten, ed., *Traditional Agriculture in Southeast Asia*. Boulder, Colorado: Westview.

Guha, Ramachandra. 1983. Forestry in British and post-British India. *Economic and Political Weekly*, 29 October 1882-97 and 5 November 1940-46.

Hafner, James A. 1990. Forces and policy issues affecting forest use in northeast Thailand, 1900-1985, pp. 69-94. In Mark Poffenburger, ed., *Keepers of the Forest*.

Hafner, James A. and Yaowalak Apichatvullop. 1990. Migrant farmers and the shrinking forests of northeast Thailand, pp. 187-219. In Mark Poffenburger, ed., *Keepers of the Forest*.

Hirsch, Philip. 1989. Forests, forest reserve, and forest land in Thailand. *The Geographical Journal* 156 (2): 166-74.

Hoamuangkaew, Wuthipol, Lert Chuntanaparb, and Prin Sri-Anan. 1988. Agro-Forestry in Dong Mun forest communities, Northeast Thailand. (KU/Ford Foundation 870-0535, Working Document 4.)

Hoamuangkaew, Wuthipol, Prin Sri-Anan and Lert Chuntanaparb. 1988. Agro-Forestry in Tab Lan Forest Communities, Soeng Sang, Nakhon Ratchasima, Northeast Thailand. Kesetsart University: Northeast Thailand Upland Social Forestry Project. (KU/Ford Foundation 870-0535, Working Document No. 7.

Hoare, Peter and Somphob Larchrojna. [1987]. Change in traditional management of forests: A study of Thailand's Karen Hill people, pp. 165-88. In Y.S. Rao, Marilyn W. Hoskins, Napoleon Vergara and Charles P. Castro, eds., Community forestry: Lessons from case studies in Asia and the Pacific region.

Ing, K. 1987. Phra Ajarn Pongsadki Tejadhammo: Troublemaker or troubleshooter. The Nation, 23 August.

Jetenewait, Songpan, W. Permpongsajalain, and Kelso Atipo. 1990. Different perspectives on forest plantations (in Thai), 4-5. Development Advocate No. 3.

Judd, Laurence C. 1964. Dry rice agriculture in northern Thailand. Cornell Thailand Project, Interim Reports Series 7. Ithaca, New York: Cornell University.

Kaiyoorawong, Sayamol and Dilbur Parakh. 1989. Whose land Is this? Union for Civil Liberty Newsletter, January-June: 9-12.

Kanjanawanawan, Suda and Panee N. Kornkig. 1989. Whose forest is it anyway? The Nation, 18 July.

Kaye, Lincoln. 1990 (December 13). Of cabbages and cultures: Buddhist "greens" aim to oust Thailand's hilltribes. Far Eastern Economic Review 35.

Keen, F.G.B. 1978. Ecological relationships in a Hmong (Meo) economy, pp. 210-221. In Peter Kunstadter, E.C. Chapman, and Sanga Sabhasri, ed., Farmers in the forest. Honolulu: East West Center.

Keep an eye on the multinationals which hold land in Thailand Special report (in Thai). 1990. NGO Newsletter 5(6): 12-16.

Kemp, Jeremy. 1981. Legal and informal land tenures in Thailand. Modern Asian Studies 15 (1): 1-23.

Keyes, Charles F. 1987. Tribal peoples and the nation-state in mainland Southeast Asia, pp. 19-26. In Southeast Asian Tribal Groups and Ethnic Minorities, Cultural Survival Report 22. Cambridge, Massachusetts: Cultural Survival.

Khanchanapan, Anan. 1988. Resources management and development: Observations from a study in Northern Thailand, pp. 133-36. In People and forestry in Thailand: Status, problems, and prospects. Proceedings of a symposium organized by Chulanlongkorn University Social Research Institute, 8-9 September.

Komkris, Thiem. 1978. Forestry aspects of land use in areas of swidden cultivation, pp. 61-70. In Peter Kunstadter, E.C. Chapman, and Sanga Sabhasri, eds., Farmers in the forest. Honolulu: East West Center.

Kriengkraipetch, Suvanna. 1989. Thai fold beliefs about animals and plants and attitudes toward nature, pp. 195-211. In Culture and environment in Thailand. Bangkok: Siam Society.

Kriyurawong, Sayamol. 1987. Land problems in the highlands in the far north. Union for Civil Liberty Newsletter, January-June: 16-19.

Kunstadter, Peter. 1978. Subsistence agricultural economies of Lua' and Karen hill farmers, Mae Sariang District, northwestern Thailand, pp. 74-133. In Peter Kunstadter, E.C. Chapman, and Sanga Sabhasri, ed., Farmers in the forest. Honolulu: East West Center.

Kunstadter, Peter. 1980. The impact of economic development on Southeast Asian tropical forests. Tropical Ecology and Development, 1980: 65-72.

Kunstadter, Peter. 1987. Swiddeners in transition: Lua' farmers in northern Thailand, pp. 130-55. In B.L. Turner II and Stephen B. Brush, eds., Comparative farming systems. New York: Guilford Press.
Kunstadter, Peter. 1988. The hill people of northern Thailand, pp. 93-110. In Julie Denslow and Christine Padoch, eds., People and the rain forest. Berkeley, California: University of California.

Kunstadter, Peter and E.C. Chapman. 1978. Problems of shifting cultivation and economic development in Northern Thailand, pp. 3-23. In Kunstadter, Peter, E.C. Chapman, and Sanga Sabhasri, eds. 1978. Farmers in the Forest. Honolulu: East West Center.

Kunstadter, Peter, E.C. Chapman, and Sanga Sabhasri, eds. 1978. Farmers in the Forest. Honolulu: East West Center.

Kunstadter, Peter, Sanga Sabhasri, and Tem Smitinand. 1978. "Flora of a forest fallow farming environment in northwestern Thailand." Journal of the National Research Council of Thailand 10(1):1-45.

Levin, Penny. 1991. Indigenous forest management strategies: A Songkla and Suratthani example - A comparison of least forested and most Forested resource Areas. Honolulu: East-West Center Working paper (draft).

Levin, Penny. 1991. Non-timber forest products: Wild edible plant resources in southern Thailand.

Paper presented at the XVII Pacific Science Congress, Honolulu.

Lindley, Mark F. 1926. The acquisition and government of backward territory in international law. London: Longmans, Green.

Local Development Institute. 1990. Community forestry in Thailand: Development perspective. Research proposal submitted by the Local Development Institute to the Ford Foundation/Bangkok.

Lohmann, Larry. 1990a. Commercial tree plantations in Thailand: Deforestation by any other name. *The Ecologist* 20(1), 9-17.

Lohmann, Larry. 1990b. Who defends biological diversity? Conservation strategies and the case of Thailand. Mimeo.

Lynch, Owen J. 1990. Whither the people? Demographic, tenurial and agricultural aspects of the tropical forestry action plan. Washington, D.C.: World Resources Institute.

Lynch, Owen J. and Kirk Talbott. 1988. Legal responses to the Philippine deforestation crises. *New York University Journal of International Law and Politics*, 20(3), 679-713.

McDougal, M., and W. Michael Reisman, eds. 1981. *International law in contemporary perspective*. Mineola, New York: Foundation Press.

McKinnon, John. 1989. Structural assimilation and the consensus: clearing grounds on which to rearrange our thoughts, pp. 303-359. In John McKinnon and Bernard Vienne, eds., *Hill tribes today: Problems in change*.

McNeeley, Jeffrey A. 1989. Common property resource management or government ownership: Improving the conservation of biological resources. Paper presented at the Conference on Incentives and Constraints: Macroeconomic Policy Impacts on Natural Resource Utilization, Smithsonian Institution, Washington, D.C., May 11-12.

Mehl, Charles B. 1986. If there was no land to clear anywhere: Social and cultural aspects of land inheritance and transactions in rural Thailand. Paper prepared for the World Bank Agricultural and Rural Development Department.

Mekloy, Pongpot. 1990 (November 14). Battle of highland and lowland, 1, 28. *Bangkok Post*.

Ministry of Agriculture and Cooperatives and Finnish International Development Agency (FINNIDA). 1989. Master plan for forestry development in Thailand, terms of reference. Approved by RFD and FINNIDA, September, 1989, Bangkok.

Moerman, Michael and Patricia L. Miller. 1989. Changes in a village and relations with its

environment. In Culture and environment in Thailand. Bangkok, Siam Society.

Moniaga, Sandra. 1991. Towards community-based forestry and recognition of adat property rights in the outer islands of Indonesia: A legal and policy analysis. Paper prepared at a Workshop on Legal Issues in Social Forestry that was sponsored by the Environmental and Policy Institute, East-West Center.

Nartsupha, Chatthip. 1990. Settakit muban thai nai adit (Economics of the Thai village in the past, 1455-1855), third ed. Bangkok, Shangsang Publisher.

NGO Coordinating Committee on Rural Development. 1989. Forest land crises and solutions. Bangkok: NGO Coordinating Committee.

Northeast Thailand Upland Social Forestry Project (NTUSFP). 1987. Summary report: Human forest interaction in northeast Thailand. Khon Kaen University: NTUSFP.

The national forest policy & the forest reserve act: Big business who occupy degraded forests (in Thai). 1990. Development Advocate 3:38.

News brief on resettlement of people displaced by dam. 1990. The Nation. 10 November.

Northeast Thailand Upland Social Forestry Project (NTUSFP). 1987. Summary report on human forest interactions in Northeast Thailand. KU/KKU/FOrd 8500391, NTUSFP Final Report 3.

Olofson, H. 1983. Indigenous agroforestry systems. Philippine Quarterly of Culture and Society 11:149-74.

Onchan, Tongroj, ed. 1990. A land policy study. Bangkok: Thailand Development Research Foundation.

100 villagers take over forest plot of MP's wife. 1989. Bangkok Post, 19 July.

PACMAR. 1989. Action plan for a private tree farm development program, Thailand: A socio-commercial approach. Bangkok: PACMAR.

Panayotou, Theodore. 1988. Management of natural resources for sustainable development: Market failures, policy distortions and policy options. Paper prepared for U.S. Agency for International Development/Thailand.

Panayotou, Theodore. 1989. The economics of man made natural disasters: A framework for rehabilitation and prevention. In Safeguarding the future: Restoration and sustainable development in the south of Thailand. Bangkok: National Economic and Social Development Board and U.S. Agency for International Development/Thailand.

Participatory Rural Appraisal Handbook. 1990. Prepared jointly by the National Environment Secretariat of the Government of Kenya, Clark University, Edgerton University, and the World Resources Institute's Center for International Development and Environment.

Pattaratuma, A. 1988. The northeast Thailand upland social forestry project. In David Taylor and Charles Mehl eds., Collaborative research on farm and village forestry. Arlington, Virginia: WINROCK.

Project for Ecological Recovery and Mountain People's Conservation and Development. 1987. Seminar about community forests (in Thai). Mimeo.

Project for Ecological Recovery and Mountain People's Conservation and Development. 1989. Overall picture of forestry and land problem of the villages (in Thai). Mimeo.

Permongsacharoen, Witoon. 1989. Forestry problems -- From the villagers' point of view. Paper presented at the seminar on Forest Problems, March. Project for Ecological Recovery. Mimeo.

Permongsacharoen, Witoon. 1990. Tropical forest movements: Some lessons from Thailand. In Deforestation. Arbetigemeinschaft, Regenwald und Artenschutz. West Germany.

Phantumvanit, Dhira, Theodore Panoyotou, and Songpol Jetanavanich. 1990. Eucalyptus: For Whom and For What? TDRI Quarterly Review 5(2).

Pimmanrojnagool, Viroj and Sittichai Ungphakorn. 1987. Uplifting Thailand's disadvantaged villagers: An interagency highland development program," pp. 221-34. In Y.S. Rao, Marilyn W. Hoskins, Napoleon Vergara, and Charles P. Castro, eds., Community forestry: Lessons from case studies in Asia and the Pacific region.

Pintootong, Prapad. 1990. Impact of NIC transition: Land crisis (in Thai). NGO Newsletter 5(6): 9-11.

Poffenberger, Mark, ed. 1990. Keepers of the forests: Land management alternatives in southeast Asia. West Hartford, Connecticut: Kumarian Press.

Pongsapich, Amara. 1982. The development of the concept of private ownership. Paper presented at the Second Thai-European Research Seminar, Saarbrueken, Germany, 14-18 June.

Pongsapich, Amara. 1989. Action Plan for a Private Tree Farm Development Program, Thailand: A Socio-Commercial Approach, Socio-Economic Aspects, Annex 10. PACMAR, Inc., in association with A&R Consultants.

Poopat, Thana. 1990. NGOs pull out of forestry project. The Nation, 2 August.

Potter, Jack. 1975. Thai peasant social structure. Chicago: University of Chicago Press.

Pragtong, Komon. 1987. Helping people help themselves: A report on Thailand's forest villages, pp. 205-219. In Y.S. Rao, Marilyn W. Hoskins, Napoleon Vergara, and Charles P. Castro, eds., Community forestry: Lessons from case studies in Asia and the Pacific Region.

Pragtong, Komon and David E. Thomas. 1990. Evolving Management Systems in Thailand, pp. 167-86. In Mark Poffenberger, ed., Keepers of the Forest.

Ramitanondh, Shalardchai. 1989. Forests and deforestation in Thailand: The pandisciplinary approach, pp. 23-50. In Culture and environment in Thailand. Bangkok: Siam Society.

Ramsey, James A. 1982. The limits of land reform in Thailand. The Journal of Developing Areas 16:173-96.

Ratanakhon, Sophon. 1978. Legal aspects of land occupation and development, pp. 43-53. In Peter Kunstadter, E.C. Chapman, and Sanga Sabhasri, eds., Farmers in the forest: Economic development and marginal agriculture in northern Thailand. Honolulu: East West Center.

Rerkasem, B. and K. Rerkasem. 1984. The agroecological niche and farmer selection of rice varieties in the Chiang Mai Valley, Thailand, pp. 303-311. In Terry Rambo and Percy Sajise, eds., An introduction to human ecology research on agricultural systems in Southeast Asia. Laguna: University of the Philippines.

Research and Development Institute. n.d. Problems of forestry in the Northeast: What should the cabinet do? (in Thai). Research and Development Institute: Khon Kaen University.

Redhead, J.F. 1986. Social forestry at Kesetsart University: Curriculum development Thailand. Rome: Food and Agriculture Organization of the United Nations.

Royal Forestry Department. 1990. Community forestry in Chiang Mai region (in Thai). Mimeo.

Rhum, Michael R. 1987. The future of the past in northern Thailand, pp. 117-24. In Southeast Asian Tribal Groups and Ethnic Minorities, Cultural Survival Report 22. Cambridge, Massachusetts: Cultural Survival.

Rigg, Jonathon. 1987. Forces and influence behind the development of cash cropping in northeast Thailand." Geographical Journal 15(3):370-82.

Rojanalak, Disathat. 1990. Concrete jungle on forest reserve dilemma for authorities. Bangkok Post, 11 November.

Rojanalak, Disathat. 1990. Time for villagers to have their say in forming policy. Bangkok Post,

November 11, 1990.

Roy, S.B. 1991. Forest protection committees in West Bengal, India: Emerging policy issues. Paper prepared at a Workshop on Legal Issues in Social Forestry that was sponsored by the Environmental and Policy Institute, East-West Center.

Runge, C. Ford. 1986. Common property and collective action in economic development. *World Development* 14:5: 623-635.

Rutherford, Danilyn Fox. 1990. The prospects for legal approaches to securing forest tenure rights in Indonesia's outer islands. Paper submitted to the Ford Foundation in Jakarta.

Safeguarding the future: Restoration and sustainable development in the south of Thailand. 1989. Bangkok: National Economic and Social Development Board and U.S. Agency for International Development/Thailand.

Sanguantam, P., Lert Chuntanaparb, and P. Prasomsin. 1988. Multi-resource inventories in Dong Mun forest communities, Northeast Thailand. (KU/Ford Foundation 870-0535 Working Document No. 3.)

Sargent, Caroline. 1990. The Khun Song Plantation: A Socio-Economic and Environmental Analysis and Recommendations Towards the Establishment and Management of a Plantation in Chanthaburi Province by Shell Companies in Thailand. London: International Institute for Environmental and Development.

Scott, James B. 1934. The Spanish origin of international law: Francisco de Vitoria and his law of nations. Oxford, United Kingdom: Oxford University Press.

Scott, James C. 1976. The moral economy of the peasant: Rebellion and subsistence in Southeast Asia. New Haven: Yale University Press.

Sektherra, R. and A.R. Thodey. 1975. Irrigation systems in the Chiang Mai Valley: organization and management, pp. 81-95. In A.R. Thodey, ed., Multiple cropping in northern Thailand: Selected papers. Chiang Mai University, Agricultural Economics Report 6.

Sermiski, Santhat. 1989. Population growth and environmental protection in Thailand, pp. 71-91. In Culture and environment in Thailand. Bangkok: Siam Society.

Setboonsarng, Suthad, and Prasong Werakarnjanapongs. 1988. Forestry and land use policy. Bangkok: Thailand Development Research Foundation.

Seymour, Francis J. and Danilyn Rutherford. 1990. Contractual agreements in Asian social forestry programs. Paper presented at the First Annual Meeting of the International Association for the Study

of Common Property, Durham, North Carolina, 27-30 September.

Sherman, Paul and John Dixon. 1989. Economics of protected areas in developing countries: General issues and examples from Thailand. Report to U.S. Agency for International Development/ANE.

Siam Society. 1989. Culture and environment in Thailand. Bangkok.

Smitinand, Tem. 1989. Thailand, pp. 65-82. In David G. Campbell and H. David Hammond, eds., Floristic inventory of tropical countries. Bronx, New York: New York Botanical Garden.

Southgate, Douglas, and Peter May. 1990. The suppression of common property in Latin America. Paper presented at the First Annual Meeting of the International Association for the Study of Common Property, Durham, North Carolina, 27-30 September.

Sponsel, Leslie E., and Poranee Natadecha. 1988. Buddhism, ecology and forests in Thailand. Proceedings of the IUFRO Forest History Workshop, Canberra, 16-18 May.

Sricharatchanya, Paisal. 1987. Jungle warfare: Thailand mounts campaign to save its trees. Far Eastern Economic Review 137(38): 86-88.

Subhadhira, Sukaesinee, Yaowalak Apichatvullop, Prasit Kunurat, and James A. Hafner. 1987. Case studies of human forest interactions in Northeast Thailand. KU/KKU/FORD 8500391. Northeast Thailand Upland Social Forestry Project, Final Report 2. Bangkok.

Subhasri, S. 1978. Effects of forest fallow cultivation on forest production and soil, pp. 160-184. In Kunstadter, Peter, E.C. Chapman, and Sanga Sabhasri, eds. 1978. Farmers in the Forest. Honolulu: East West Center.

Surarerks, Vanben. 1986. Historical development and management of irrigation systems in northern Thailand. Bangkok: Ford Foundation and Chiang Mai University, Department of Geography.

Survival International. 1988. Brutal expulsion of hill tribes. Reprinted in Union for Civil Liberty Newsletter, January-June: 20-21.

Sustainable development of natural resources: A study of the concepts and applications of his majesty the king of Thailand. 1988. Bangkok: United nations Environment Programme.

Tangwisuttijit, Nantiya. 1990. Green grass or golden rice. The Nation, 20 November.

Tankimyong, Uriawan. 1987. How bo ya kokng sue. Sue bo ya kong how: Strength of the local culture in northern region." In Royal Forestry Department, ed., Community forest in Thailand: Management of land in national restricted forest. Bangkok.

Thailand Development Research Institute (TDRI). 1987. Thailand natural resources profile: Is the resource base for Thailand's development sustainable? Bangkok: TDRI.

Thailand NGO Coordinating Unit. 1989. Report on impacts and problems caused by reforestation policy in the lower part of northeast Thailand (in Thai). Mimeo.

Union for Civil Liberties (UCL). 1988. The impacts from reforestation policy of the government (in Thai). Discussion paper for a meeting sponsored by UCL 10-11 December. Mimeo.

United Nations Environment Programme. Sustainable Development of Natural Resources.

Vallibhotama, Srisakra. 1989. Traditional Thai villages and cities: an overview, pp. 359-69. In Culture and environment in Thailand. Bangkok: Siam Society.

Van Liere, W.J. 1989. Mon-Khmer approaches to the environment, pp. 142-59. In Culture and Environment in Thailand. Bangkok: Siam Society.

Villagers' rally moves Nong Khai authorities. 1990. The Nation, 10 November.

Visetbhakdi, Norani. 1989. Deforestation and reforestation in Thailand. Bangkok Bank Monthly Review, June 241-51.

Vitoria, Francisco de. 1932 (1539). Francisco de Vitoria:: Addresses in commemoration of his lectures. Washington, DC: Catholic University of America.

Westoby, Jack. 1989. Introduction to world forestry. New York: Basil Blackwell.

Whitmore, John K. The Thai-Vietnamese struggle for Laos in the nineteenth century, pp. 52-66. In Laos: War and revolution. New York: Harper & Row.

Winterbottom, Robert. 1990. Taking stock: The tropical forestry action plan after five years. Washington, D.C.: World Resources Institute.

Yano, Toru. 1968. Land tenure in Thailand. Asian Survey 8(10): 853-863.

Zerner, Charles. 1990. Community rights, customary law, and the law of timber concessions in Indonesia's forests: Legal options and alternatives in designing the commons. Food and Agriculture Organization of the United Nations Forestry Studies Paper UTF/INS/065.

Zinke, Paul J., Sanga Sabhasri, and Peter Kunstadter. 1978. Soil fertility aspects of the Lua' forest fallow system of shifting agriculture, pp. 134-159. In Peter Kunstadter, E.C.Chapman, and Sanga Sabhasri, eds., Farmers in the forest. Honolulu: East West Center.